

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:

400321070

Date Received:

09/11/2012

Oil and Gas Location Assessment

New Location  Amend Existing Location Location#: 335590

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:  
**335590**  
Expiration Date:  
**10/18/2015**

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: N. Parachute Number: WF I25 596  
 County: GARFIELD  
 Quarter: NESE Section: 25 Township: 5S Range: 96W Meridian: 6 Ground Elevation: 5824  
 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: 2118 feet FSL, from North or South section line, and 289 feet FEL, from East or West section line.  
 Latitude: 39.584719 Longitude: -108.109636 PDOP Reading: 1.8 Date of Measurement: 11/08/2011  
 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="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="text" value="38"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="text" value="3"/>	Water Tanks: <input type="text" value="4"/>	Separators: <input type="text" value="6"/>	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="text" value="2"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="text" value="1"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: \_\_\_\_\_

6. Construction:

Date planned to commence construction: 06/15/2013 Size of disturbed area during construction in acres: 7.18  
 Estimated date that interim reclamation will begin: 09/01/2015 Size of location after interim reclamation in acres: 2.48  
 Estimated post-construction ground elevation: 5824 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: \_\_\_\_\_  
 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: 20100017  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: 2238, public road: 3573, above ground utilit: 600  
 , railroad: 41712, property line: 5309

**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 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 #46. Nihill channery loam, 1 to 6 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: 05/03/2012  
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: 100, water well: 484, depth to ground water: 50  
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 is an expansion of an existing pad. The reference area is located immediately adjacent to the pad to the south on undisturbed land (additional pictures will be sent within 12 months). It will be reclaimed to the area to the south. This pad is on Encana surface, however the wells will be drilled to both fee and federal minerals.

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

Signed: \_\_\_\_\_ Date: 09/11/2012 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: 10/19/2012

**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:**

Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

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

Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations (as shown on the Proposed BMPs attachment); 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 (at least every 14 days), and maintained in good condition.

The moisture content of any freshwater generated 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 the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permitted has been submitted/approved) 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.

**Attachment Check List**

Att Doc Num	Name
1293022	CORRESPONDENCE
1533759	LOCATION DRAWING
400321070	FORM 2A SUBMITTED
400321836	NRCS MAP UNIT DESC
400321837	MULTI-WELL PLAN
400321838	ACCESS ROAD MAP
400321841	CONST. LAYOUT DRAWINGS
400321844	HYDROLOGY MAP
400321853	LOCATION PICTURES

Total Attach: 9 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Unchecked surface owner is mineral owner and corrected mineral owner from Fee to Federal. Encana owns surface and BLM owns minerals at SHL. Changed surface location QQ to NESE to correspond to existing wells on this pad. No LGD or public comments. Final Review--passed.	10/18/2012 2:25:40 PM
Permit	Corrected SHL footages for pad to agree with well loc. plat for reference well, WF01C-25	10/16/2012 1:08:29 PM
OGLA	Initiated/Completed OGLA Form 2A review on 10-16-12 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks, and cuttings low moisture content COAs from operator on 10-16-12; received acknowledgement of COAs from operator on 10-17-12; passed by CPW on 09-17-12 with operator WMP acceptable; passed OGLA Form 2A review on 10-17-12 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, and cuttings low moisture content COAs.	10/16/2012 12:28:55 PM
Permit	Attached revised location drawing.	10/15/2012 1:58:07 PM
Permit	Corrected qtr/qtr to TRT 37. Added related APD's.	10/8/2012 8:56:03 AM
LGD	Passed DB	9/19/2012 3:50:19 PM
DOW	This well pad is located within the boundary of the approved North Parachute Ranch-CPW Wildlife Mitigation Plan. The BMPs were developed and agreed upon in the consultation and development of the Wildlife Mitigation Plan by EnCana and CPW. CPW affirms that the BMPs and conditions of approval of the Wildlife Mitigation Plan suffice to address wildlife mitigation concerns.  by Jim Komatinsky 9-17-2012	9/17/2012 4:30:11 PM
Permit	Operator included well surety ID number. Operator completed Question No. 1, indicated location is SWH (GIS mapping also indicates location is RSO).	9/17/2012 10:46:31 AM
Permit	Return to Draft: 1. Well surety ID number is incomplete. 2. Question No. 1 is incomplete; missing check for SWH and RSO if applicable.	9/13/2012 12:48:38 PM

Total: 9 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<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>• 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>
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></ul>

Total: 2 comment(s)