

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:

400327461

Date Received:

09/24/2012

Oil and Gas Location Assessment

New Location

Amend Existing Location

Location#: 334156

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:

**334156**

Expiration Date:

**10/17/2015**

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: Bonnie Lamond

Phone: (720) 876-5156

Fax: (720) 876-6177

email: bonnie.lamond@encana.com

4. Location Identification:

Name: Shideler Fee

Number: 31-13C (O31E)

County: GARFIELD

Quarter: SWSE Section: 31 Township: 7S Range: 92W Meridian: 6 Ground Elevation: 7107

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: 208 feet FSL, from North or South section line, and 2021 feet FEL, from East or West section line.

Latitude: 39.396357 Longitude: -107.706118 PDOP Reading: 2.9 Date of Measurement: 09/10/2012

Instrument Operator's Name: C.D. Slaugh

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="32"/>	Production Pits: <input type="text" value="0"/>	Dehydrator Units: <input type="text" value="0"/>
Condensate Tanks: <input type="text" value="13"/>	Water Tanks: <input type="text" value="0"/>	Separators: <input type="text" value="32"/>	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="1"/>
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: \_\_\_\_\_

6. Construction:

Date planned to commence construction: 10/16/2012 Size of disturbed area during construction in acres: 9.08  
Estimated date that interim reclamation will begin: 08/15/2014 Size of location after interim reclamation in acres: 3.47  
Estimated post-construction ground elevation: 7107 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: 09/08/2011  
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: 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: 6821, public road: 1714, above ground utilit: 6821  
, railroad: 48840, property line: 208

### 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: 7, Ascalon- Pena complex, 6-25 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: \_\_\_\_\_

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): The Reference Area is adjacent west of the pad

### 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: 625, water well: 7120, depth to ground water: 56  
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 depth to ground water is 56' based on the nearest permitted water well ~7000' north of the pad. The nearest distance is to a public road: 1,706 feet. The Reference Area is immediately adjacent to the well pad to the west.

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

Signed: \_\_\_\_\_ Date: 09/24/2012 Email: bonnie.lamond@encana.com

Print Name: Bonnie Lamond 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: 10/18/2012

**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:**

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 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.

Berms or other containment devices shall be constructed to be sufficiently impervious (preferably corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

**Attachment Check List**

Att Doc Num	Name
400327461	FORM 2A SUBMITTED
400328711	ACCESS ROAD MAP
400328712	CONST. LAYOUT DRAWINGS
400328715	LOCATION PICTURES
400328716	MULTI-WELL PLAN
400328719	HYDROLOGY MAP
400328725	LOCATION DRAWING
400329715	NRCS MAP UNIT DESC

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comments. Final Review--passed.	10/16/2012 9:29:59 AM
OGLA	Initiated/Completed OGLA Form 2A review on 10-16-12 by Dave Kubeczko; placed fluid containment, spill/release BMPs, tank berming, flowback to tanks, and cuttings low moisture content COAs on permit on 10-16-12; passed by CPW on 10-04-12 with operator submitted BMPs (with permit application) acceptable; passed OGLA Form 2A review on 10-16-12 by Dave Kubeczko; fluid containment, spill/release BMPs, tank berming, flowback to tanks, and cuttings low moisture content COAs.	10/16/2012 8:32:43 AM
Permit	Corrected dist. to prop. line per oper. Matches distances on APD's. Amended 2A submitted to add wells to existing pad and expand pad.	10/11/2012 12:57:17 PM
Permit	Oper. req'd approval as soon as comment period expires to expedite rig schedule. Added related APD's.	10/8/2012 3:48:37 PM
DOW	THE BMPs submitted with the Form 2A application adequately address wildlife concerns.  Jim Komatinsky 10-4-2012	10/4/2012 1:44:12 PM
LGD	Passed DB	9/25/2012 2:54:02 PM
Permit	Operator completed plant community section.	9/25/2012 2:34:50 PM
Permit	Return to draft: 1. Plant community section is incomplete.	9/25/2012 10:52:48 AM

Total: 8 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<p>Minimize the number, length and footprint of oil &amp; gas development roads Use existing routes where possible Combine utility infrastructure planning (gas, electric &amp; water) when possible with roadway planning to avoid separate utility corridors Coordinate Employee transport when possible</p> <p>Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors. Maximize use of state-of-the-art drilling technology (e.g., high efficiency rigs, coiled-tubing unit rigs, closed-loop or pitless drilling, etc.) to minimize disturbance.</p> <p>Reclaim mule deer and elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.</p>
Construction	<p>(Not all are used all the time) Terminal Containment, Diversions, Run-On Protection, Tracking, Benching, Terracing, ECM (Erosion Control Mulch), ECB (Erosion Control Blanket), Check Dams, Seeding, Mulching, Water Bars, Stabilized Unpaved Surfaces (Gravel), Stormwater &amp; Snow Storage Containment, Scheduling, Phased Construction, Temporary Flumes, Culverts with inlet &amp; outlet protection, Rip Rap, TRM (Turf Reinforcement Mats), Maintenance, Scheduling, Phased Construction, Fueling BMP's, Waste Management BMP's, Materials Handling BMP's</p>
Pre-Construction	<p>Wattles, Silt Fence, Vegetation Buffers, Slash, Topsoil Windrows (diversions &amp; ROP's), Scheduling, Phased Construction</p>
Final Reclamation	<p>Maintenance Revegetation Monitoring BMP maintenance &amp; monitoring Weed Management</p>

Total: 4 comment(s)