

**FORM  
2A**Rev  
04/01State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

400097909

**Oil and Gas Location Assessment**☐ New Location ☒ Amend Existing Location Location#: 335806

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 stand alone 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:

**335806**

Expiration Date:

**11/12/2013**☒ 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: Julia Carter

Phone: (720) 876.5240

Fax: (720) 876.6240

email: Julia.Carter@encana.com

**4. Location Identification:**

Name: N. Parachute Number: EF P27 595

County: GARFIELD

Quarter: SESE Section: 27 Township: 5S Range: 95W Meridian: 6 Ground Elevation: 6650

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: 601 feet, from North or South section line: FSL and 535 feet, from East or West section line: FEL

Latitude: 39.579225 Longitude: -108.033122 PDOP Reading: 2.1 Date of Measurement: 11/01/2008

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="1"/>	Drilling Pits: <input type="text" value="0"/>	Wells: <input type="text" value="37"/>	Production Pits: <input type="text" value="0"/>	Dehydrator Units: <input type="text" value="0"/>
Condensate Tanks: <input type="text" value="0"/>	Water Tanks: <input type="text" value="4"/>	Separators: <input type="text" value="37"/>	Electric Motors: <input type="text" value="3"/>	Multi-Well Pits: <input type="text" value="0"/>
Gas or Diesel Motors: <input type="text" value="3"/>	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="3"/>	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="1"/>	

Other: Meter Houses, 10; Please see attached Facilities List

## 6. Construction:

Date planned to commence construction: 12/01/2010 Size of disturbed area during construction in acres: 6.49  
Estimated date that interim reclamation will begin: 04/01/2012 Size of location after interim reclamation in acres: 1.95  
Estimated post-construction ground elevation: 6642 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 & 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 Mgnt. Surety ID: \_\_\_\_\_

## 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒  
Distance, in feet, to nearest building: 21500, public road: 21600, above ground utilit: 19500  
, railroad: 41730, property line: 535

## 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 Complex, very steep

NRCS Map Unit Name: 48. Northwater loam, 15 to 65 percent slopes

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: 08/05/2010

List individual species: \_\_\_\_\_  
\_\_\_\_\_

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)  
☐ Native Grassland (Bluestern, 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: 80, water well: 3512, 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 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:

Please note that Encana owns both surface and minerals for this location. All distances in #9 (section VI) Cultural are taken from the N. Parachute EF01A-34 P27 595 well. Please reference the attached Facilities List for a more detailed account of what will be on the location.

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

Signed: \_\_\_\_\_ Date: 10/05/2010 Email: Julia.Carter@encana.com

Print Name: Julia M. Carter 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.

*David S. Neslin*

COGCC Approved: \_\_\_\_\_

Director of COGCC

Date: 11/13/2010

**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.**

Operator will use adequately sized containment devices for all chemicals and/or hazardous materials stored or used on location.

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 and frac pad locations will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.

Location is in a sensitive area because of its proximity to surface water; therefore, operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations.

Operator must implement best management practices to contain any unintentional release of fluids.

Operator will conduct regular inspections of equipment for leaks and equipment problems with appropriate documentation retained in the operator's office. All equipment deficiencies shall be corrected. Monitoring should end approximately 30 days after well completion and/or after production has been stabilized; however, timely inspections should continue during the production phase.

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.

Location is in a sensitive area because of shallow groundwater; therefore either a lined drilling pit or a closed loop system (which EnCana has already indicated on the Form 2A) must be implemented.

If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of fluids.

No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.

Flowback to tanks only. Flowback and stimulation fluids shall be contained within tanks that are placed on the frac pad in an area with additional downgradient perimeter berming. Operator must submit a secondary and tertiary containment plan via sundry notice Form 4 for the tanks to Dave Kubeczko. Operator must obtain approval of the plan prior to fracing flowback operations.

The location is in an area of high runoff/run-on potential from the proposed pad area; therefore the pad expansion shall be constructed as quickly as possible and appropriate BMPs need to be in place both during and after well pad expansion 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.

### Attachment Check List

Att Doc Num	Name	Doc Description
2033483	CORRESPONDENCE	LF@2609179 2033483
400097909	FORM 2A SUBMITTED	LF@2599174 400097909
400097926	LOCATION PICTURES	LF@2599175 400097926
400097931	LOCATION DRAWING	LF@2599176 400097931
400097933	HYDROLOGY MAP	LF@2599177 400097933
400097934	ACCESS ROAD MAP	LF@2599178 400097934
400097935	REFERENCE AREA MAP	LF@2599179 400097935
400097939	REFERENCE AREA PICTURES	LF@2599180 400097939
400097941	NRCS MAP UNIT DESC	LF@2599181 400097941
400097942	CONST. LAYOUT DRAWINGS	LF@2599182 400097942
400097945	MULTI-WELL PLAN	LF@2599183 400097945
400097947	PROPOSED BMPs	LF@2599184 400097947
400097948	EQUIPMENT LIST	LF@2599185 400097948

Total Attach: 13 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Initiated/Completed OGLA Form 2A review on 10-11-10 by Dave Kubeczko; requested clarifications and acknowledgement of close SW fluid containment, spill/release BMPs, lined pits/closed loop, cuttings low moisture content, no pit in fill, and general close SW COAs from operator on 10-11-10; received clarifications and acknowledgement of COAs from operator on 10-26-10; passed by CDOW on 10-07-10 with operator submitted BMPs (with permit application) and WMP acceptable; passed OGLA Form 2A review on 10-29-10 by Dave Kubeczko; fluid containment, spill/release BMPs, lined pits/closed loop, cuttings low moisture content, no pit in fill, and general close SW COAs.	10/11/2010 2:16:26 PM
DOW	This well pad is located within the boundary of an approved, signed Encana-CDOW Wildlife Mitigation Plan. The BMPs were developed and agreed upon in consultation and development of the Wildlife Mitigation Plan. The BMPs as submitted  by the operator are appropriate for the site and species affected.  by Michael Warren on Thursday, October 7, 2010 at 2010 at 3:20 P.M.	10/7/2010 3:18:50 PM

Total: 2 comment(s)

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