

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



DE	ET	OE	ES
----	----	----	----

Document Number:

400163729

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:

423633

Expiration Date:

06/15/2014

☒ 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: Julia Carter

Phone: (720) 876.5240

Fax: (720) 876.6240

email: Julia.Carter@encana.com

4. Location Identification:

Name: KM Number: C08 799

County: GARFIELD

QuarterQuarter: NENW Section: 8 Township: 7S Range: 99W Meridian: 6 Ground Elevation: 6431

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: 877 feet FNL, from North or South section line, and 2505 feet FWL, from East or West section line.

Latitude: 39.465672 Longitude: -108.466519 PDOP Reading: 1.9 Date of Measurement: 07/27/2010

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="1"/>	Wells: <input type="text" value="3"/>	Production Pits: <input type="text" value="0"/>	Dehydrator Units: <input type="text" value="1"/>
Condensate Tanks: <input type="text" value="6"/>	Water Tanks: <input type="text" value="4"/>	Separators: <input type="text" value="2"/>	Electric Motors: <input type="text" value="4"/>	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="2"/>	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="1"/>	VOC Combustor: <input type="text" value="0"/>	Oil Tanks: <input type="text" value="0"/>	Fuel Tanks: <input type="text" value="1"/>	

Other: Please see attached Facilities List

6. Construction:

Date planned to commence construction: 08/01/2011 Size of disturbed area during construction in acres: 7.62
Estimated date that interim reclamation will begin: 05/01/2013 Size of location after interim reclamation in acres: 1.94
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 & 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: 19430 , public road: 260 , above ground utilit: 19430
 , railroad: 86408 , property line: 466

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: Debeque Very Channery Loam; 29

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): _____

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: 843, water well: 6867, depth to ground water: 80

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:

Encana Oil & Gas (USA) Inc. owns both surface and minerals. All distances were taken from KM DH3A-32 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: 05/16/2011 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.

COGCC Approved: _____

David S. Neslin

Director of COGCC

Date: 6/16/2011

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.

GENERAL SITE COAs:

Reserve pit, or any pit used to hold fluids, if constructed, must be lined or a closed loop system (which operator has been indicated on the Form 2A) must be implemented during drilling.

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 sufficiently protective of nearby surface water. If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of drilling, completion, or produced fluids.

Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks 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 to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

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
2033867	CORRESPONDENCE
400163729	FORM 2A SUBMITTED
400165003	LOCATION PICTURES
400165007	LOCATION DRAWING
400165010	HYDROLOGY MAP
400165012	ACCESS ROAD MAP
400165015	REFERENCE AREA MAP
400165018	NRCS MAP UNIT DESC
400165019	CONST. LAYOUT DRAWINGS
400165021	MULTI-WELL PLAN
400165022	OTHER

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
DOW	<p>Per consultation and agreement on May 31, 2011 Encana agrees to the following BMPs.</p> <p>Encana will use a wildlife friendly seed mix during interim reclamation.</p> <p>Encana will restrict post development, daily well site visitation to the hours between 9:00 am and 4:00 pm and between 12:01 am and 4:00 am for the winter period between January 1 and April 15 for elk winter range excluding safety or fluid management visits.</p>	6/13/2011 8:49:39 AM
OGLA	<p>Initiated/Completed OGLA Form 2A review on 05-30-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks, tank berming, lined pit/closed loop, and cuttings low moisture content COAs from operator on 05-30-11; received clarifications and acknowledgement of COAs from operator on 06-?-11; passed by CDOW on 06-13-11 with operator submitted BMPs (with permit application) acceptable; passed OGLA Form 2A review on 06-16-11 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, tank berming, lined pit/closed loop, and cuttings low moisture content COAs.</p>	5/30/2011 12:32:56 PM

Total: 2 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Construction	<p>-Use multiple gathering lines placed in a single trench to minimize disturbance and construction, where appropriate, economically and technically feasible.</p> <p>-Install pipeline crossings at right angles to the drainages, wetlands, and perennial water bodies, where appropriate, economically and technically feasible.</p> <p>-Limit in-stream construction activity to 24-hours for water bodies less than ten feet wide and to 48-hours for water bodies greater than ten feet wide at locations where horizontal boring is not feasible, where appropriate, economically and technically feasible.</p> <p>-Maintain a minimum of five feet of soil cover between the pipeline and the lowest point of the drainage or water body channel.</p>
Wildlife	<p>-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.</p> <p>-Perform biological surveys (on-site) for each new development, using the most recent data sets for wildlife and aquatic resources.</p> <p>-Perform pre-disturbance surveys when the on-site inspection and commencement of disturbance occur in different field seasons using the most recent data sets for wildlife and aquatic resources.</p>
Site Specific	<p>-Use solar panels as an alternative energy source for on-location production equipment, where appropriate, economically and technically feasible.</p> <p>-Prohibit Encana employees and contractors from carrying projectile weapons on Encana property, except during company organized events.</p> <p>-Prohibit pets on Encana property.</p> <p>-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.</p>

Total: 3 comment(s)