

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:

400417559

Date Received:

05/16/2013

Oil and Gas Location Assessment

☐ New Location

☒ Amend Existing Location Location#: 335928

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:

335928

Expiration Date:

06/16/2016

☐ 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: JENNIFER LIND

Phone: (720) 876-5890

Fax: (720) 876-6890

email: JENNIFER.LIND@ENCANA.COM

4. Location Identification:

Name: DWU 64S496W /

Number: 34 SWNW

County: GARFIELD

QuarterQuarter: SWNW Section: 34 Township: 4S Range: 96W Meridian: 6 Ground Elevation: 8323

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: 2108 feet FNL, from North or South section line, and 1009 feet FWL, from East or West section line.

Latitude: 39.660281 Longitude: -108.160547 PDOP Reading: 2.5 Date of Measurement: 03/14/2007

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="checkbox"/>	Drilling Pits: <input type="checkbox"/>	Wells: <input type="text" value="34"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="text" value="3"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="7"/>	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="text" value="2"/>	Gas Pipeline: <input type="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/>
Gas Compressors: <input type="text" value="4"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="checkbox"/>	Fuel Tanks: <input type="checkbox"/>	

Other: WELL COUNT INCLUDES 2 EXISTING WELLS AND 32 PROPOSED WELLS. IN ADDITION TO EQUIPMENT LISTED ABOVE, 2 METER BUILDINGS WILL BE PLACED AT THE LOCATION AT THE TIME THE WELLS ARE DRILLED.

6. Construction:

Date planned to commence construction: 05/31/2012 Size of disturbed area during construction in acres: 13.11
 Estimated date that interim reclamation will begin: 05/01/2015 Size of location after interim reclamation in acres: 4.88
 Estimated post-construction ground elevation: 8324 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: _____ ☐ 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: 19008, public road: 34320, above ground utility: 23232,
 railroad: 70752, property line: 2455

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: 53 - PARACHUTE-RHONE LOAMS, 5 TO 30 PERCENT SLOPES

NRCS Map Unit Name: 52 - PARACHUTE LOAM, 25 TO 65 PERCENT SLOPES

NRCS Map Unit Name: 63 - SILAS LOAM, 3 TO 12 PERCENT SLOPES

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: 08/13/2010

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: 788 , water well: 10567 , depth to ground water: 107

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:

AMENDMENT TO FORM 2A. THE REFERENCE POINT DATA FOR THIS AMENDED FORM 2A HAS NOT CHANGED FROM THE ORIGINAL. THE DISTURBANCE ACREAGES AND EQUIPMENT HAVE CHANGED TO REFLECT THE NEW FACILITIES PAD. ENCANA IS THE SURFACE OWNER AT THIS LOCATION. THE AREA SOUTHWEST OF THE PAD WILL SERVE AS THE REFERENCE AREA FOR RECLAMATION.

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

Signed: _____ Date: 05/16/2013 Email: JENNIFER.LIND@ENCANA.COM

Print Name: JENNIFER LIND 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: Matthew Lee Director of COGCC Date: 6/17/2013

**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:

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).

If the well is to be hydraulically stimulated, then 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
400417559	FORM 2A SUBMITTED
400419810	MULTI-WELL PLAN
400419813	HYDROLOGY MAP
400419819	NRCS MAP UNIT DESC
400419821	ACCESS ROAD MAP
400419826	CONST. LAYOUT DRAWINGS
400419838	LOCATION DRAWING
400419839	LOCATION PICTURES

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Pass. Changed total number of wells to 34 [2 existing and 32 proposed].	6/11/2013 2:46:33 PM
OGLA	Initiated/Completed OGLA Form 2A review on 06-09-13 by Dave Kubeczko; previously submitted and approved (02-22-13) Form 2A#400359604; OGCC Facility ID#335928; same COAs apply: fluid containment and spill/release BMP, cuttings moisture, closed loop/lined pit, and hillside monitoring; added notification, flowback to tanks, and tank berming COAs; passed by CPW on 05-17-13 with WMP acceptable; passed by OGLA Form 2A review on 06-11-13 by Dave Kubeczko; fluid containment and spill/release BMP, cuttings moisture, closed loop/lined pit, hillside monitoring; notification, flowback to tanks, and tank berming COAs.	3/9/2013 8:59:21 PM

OGLA	<p>PREVIOUS FORM 2A# 400359604 GENERAL SITE COAs:</p> <p>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 (at least every 14 days), and maintained in good condition.</p> <p>The nearby hillside and and fill-material bermed portions (if present) of the pit must be monitored for any day-lighting of fluids throughout pit operations.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or permanent buried pipelines.</p> <p>There is the potential for shallow groundwater; therefore either a lined drilling pit or closed loop system must be implemented.</p> <p>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.</p> <p>Notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us), the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us), and the COGCC Field Inspector for Garfield County (Mike Longworth; email mike.longworth@state.co.us) 48 hours prior to start of pad construction, pit liner installation (if applicable), 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).</p> <p>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.</p>	3/9/2013 8:59:19 PM
DOW	<p>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.</p> <p>Approved: Jim Komatinsky 5-17-2013</p>	5/17/2013 11:24:19 AM

Permit	Passed completeness.	5/17/2013 7:58:57 AM
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Total: 5 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<ul style="list-style-type: none"> • 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. • Perform biological surveys (on-site) for each new development, using the most recent data sets for wildlife and aquatic resources. • 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. • 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. • Use enclosed, locking garbage receptacles or implement a strict daily trash removal regime on each temporary or permanent work location.
Construction	<ul style="list-style-type: none"> • Use multiple gathering lines placed in a single trench to minimize disturbance and construction, where appropriate, economically and technically feasible. • Install pipeline crossings at right angles to the drainages, wetlands, and perennial water bodies, where appropriate, economically and technically feasible.
Site Specific	<ul style="list-style-type: none"> • Use solar panels as an alternative energy source for on-location production equipment, where appropriate, economically and technically feasible. • Maintain a minimum of five feet of soil cover between the pipeline and the lowest point of the drainage or water body channel. • Prohibit Encana employees and contractors from carrying projectile weapons on Encana property, except during company organized events. • Prohibit pets on Encana property. • 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.

Total: 3 comment(s)