

State of Colorado
Oil and Gas Conservation Commission

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



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Document Number:

400083420

Oil and Gas Location Assessment

☐ New Location
 ☒ Amend Existing Location
 Location#: 323792

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:

323792

Expiration Date:

12/11/2013☒ 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: Judith Walter

Phone: (720) 876-3702

Fax: (720) 876-4702

email: judith.walter@encana.com

4. Location Identification:

Name: CB Fed Number: A28 6100

County: GARFIELD

Quarter: NENE Section: 28 Township: 6S Range: 100W Meridian: 6 Ground Elevation: 6654

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: 711 feet FNL, from North or South section line, and 478 feet FEL, from East or West section line.

Latitude: 39.509967 Longitude: -108.551200 PDOP Reading: 1.5 Date of Measurement: 03/02/2010

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="0"/>	Wells: <input type="text" value="3"/>	Production Pits: <input type="text" value="1"/>	Dehydrator Units: <input type="text" value="0"/>
Condensate Tanks: <input type="text" value="6"/>	Water Tanks: <input type="text" value="6"/>	Separators: <input type="text" value="3"/>	Electric Motors: <input type="text" value="5"/>	Multi-Well Pits: <input type="text" value="0"/>
Gas or Diesel Motors: <input type="text" value="21"/>	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="2"/>
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="2"/>	

Other: See Item 15. Comments

6. Construction:

Date planned to commence construction: 11/01/2010 Size of disturbed area during construction in acres: 4.21
Estimated date that interim reclamation will begin: 09/01/2011 Size of location after interim reclamation in acres: 1.09
Estimated post-construction ground elevation: 6654 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, Amend & Bury

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 04/08/2010
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 0

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: 16956, public road: 156, above ground utilit: 10567
, railroad: 115165, property line: 1117

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): Hunting
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): Hunting
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: 07/28/2010

List individual species: See attached "CB Fed A28 6100 Plants 7.28.10.pdf"

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: 345, water well: 9273, depth to ground water: 3

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:

1) 5. Facilities Notes: Drilling: Gas or Diesel Motors: 3, Completions: Gas or Diesel Motors (max 18-min 2): frac = 18 for 2 weeks, coil tubing = 2 for 1 week, snubbing = 2 for 1 week, water=2 for 2 weeks. Temporary Fresh Water pipeline is planned for completions operations (10" diameter HDPE polyline, approx. 2.10 mile) Permanent Facilities: 1 chemical tank with pump. 2) This is an expansion to an existing pad that has the Cedar Bench Federal 6307 (05-045-06572) on it Location ID #323792, and has approximately 2.593 acres disturbed. Two new wells are planned for this pad so the pad will need to be expanded.

3) On-site date was April 8, 2010 with BLM, May 19, 2010 with BLM, USFWS, and WestWater Engineering.

4) Reference Area Map and Reference Area Photo's will be submitted within 12 months.

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

Signed: _____ Date: 08/09/2010 Email: judith.walter@encana.com

Print Name: Judith A. Walter 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: 12/12/2010

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.

All pits containing fluids (if constructed; reserve pit, production pit, frac pit) must be lined.

Location may be in a sensitive area because of shallow groundwater; therefore either a lined drilling pit or closed loop system must be implemented.

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 certified by a professional engineer, 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.

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 proximity to surface water (intermittent stream to the northeast that feeds into Roan Creek to the south); therefore, 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., BMPs associated with stormwater management) sufficiently protective of the nearby surface water.

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

Location may be in a sensitive area because of shallow groundwater; therefore any pits containing fluids (if constructed) must be lined.

Attachment Check List

Att Doc Num	Name
2033340	CORRESPONDENCE
2033341	REFERENCE AREA MAP
400083420	FORM 2A SUBMITTED
400083423	LOCATION PICTURES
400083424	LOCATION DRAWING
400083425	HYDROLOGY MAP
400083427	ACCESS ROAD MAP
400083428	NRCS MAP UNIT DESC
400083429	CONST. LAYOUT DRAWINGS
400083430	MULTI-WELL PLAN
400083433	OTHER
400084596	PROPOSED BMPs

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	There are two 2's with this 2A. Issue is that the Federal Unit outline supplied by EnCana doesn't match the LRS or what is on our website. EnCana land department was going to "look into it". EnCana was going to resubmit BHL for the DH03-21 as it was "too close" to the unit boundary. It appears to be OK lease wise but the DH08-29 appears to be very close to the lease line for the "permit TD".	9/20/2010 9:41:43 AM
DOW	CDOW attended onsite visits to this pad along with BLM in May 2010. CDOW affirms that the lease stipulations and conditions of approval assigned to the permit by the BLM suffice to address wildlife and habitat concerns for the species affected. by Michael Warren on Monday, August 16, 2010 at 9:50 A.M.	8/16/2010 5:05:06 PM
OGLA	Initiated/Completed OGLA Form 2A review on 08-16-10 by Dave Kubeczko; requested clarifications and acknowledgement of close SW fluid containment, spill/release BMPs, shallow GW lined pits/closed loop, cuttings low moisture content, no pit in fill, all pits lined COAs from operator on 08-16-10; received clarifications and acknowledgement of COAs from operator on 08-24-10; reference area photos will be submitted within 12 months; passed by CDOW on 08-16-10, with operator submitted (with permit application) BMPs acceptable; passed OGLA Form 2A review on 09-07-10 by Dave Kubeczko; fluid containment, spill/release BMPs, lined pits/closed loop, cuttings low moisture content, no pit in fill, all pits lined COAs.	8/16/2010 4:59:51 PM
Permit	Opr corrected. kk	8/13/2010 3:43:13 PM
Permit	Too many attachments, back to draft 8/10 kk	8/10/2010 4:10:01 PM
Permit	There are two 2's with this 2A. Issue is that the Federal Unit outline supplied by EnCana doesn't match the LRS or what is on our website. EnCana land department was going to "look into it". EnCana was going to resubmit BHL for the DH03-21 as it was "too close" to the unit boundary. It appears to be OK lease wise but the DH08-29 appears to be very close to the lease line for the "permit TD". BY 9/20/10	

Total: 6 comment(s)

BMP

<u>Type</u>	<u>Comment</u>

Total: 0 comment(s)