

FORM
2ARev
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:

400210929

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:

426478

Expiration Date:

11/14/2014☒ 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: SG Number: L24 496

County: GARFIELD

QuarterQuarter: NWSW Section: 24 Township: 4S Range: 96W Meridian: 6 Ground Elevation: 8184

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: 1631 feet FSL, from North or South section line, and 916 feet FWL, from East or West section line.

Latitude: 39.685031 Longitude: -108.123236 PDOP Reading: 1.3 Date of Measurement: 08/18/2010

Instrument Operator's Name: Greg Olsen

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

| | | | | |
|-------------------------|------------------|-----------------|--------------------|---------------------|
| Special Purpose Pits: 0 | Drilling Pits: 0 | Wells: 28 | Production Pits: 0 | Dehydrator Units: 0 |
| Condensate Tanks: 0 | Water Tanks: 1 | Separators: 0 | Electric Motors: 0 | Multi-Well Pits: 0 |
| Gas or Diesel Motors: 0 | Cavity Pumps: 0 | LACT Unit: 0 | Pump Jacks: 0 | Pigging Station: 0 |
| Electric Generators: 0 | Gas Pipeline: 2 | Oil Pipeline: 0 | Water Pipeline: 1 | Flare: 0 |
| Gas Compressors: 0 | VOC Combustor: 0 | Oil Tanks: 0 | Fuel Tanks: 0 | |

Other: 12 meter houses

6. Construction:

Date planned to commence construction: 04/01/2012 Size of disturbed area during construction in acres: 8.65
Estimated date that interim reclamation will begin: 05/01/2014 Size of location after interim reclamation in acres: 2.06
Estimated post-construction ground elevation: 8180 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: _____ ☐ Gas Facility Surety ID: _____ ☐ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 5200, public road: 1035, above ground utilit: 38300
, railroad: 77800, property line: 3762

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: Parachute-Rhone Loams; 53

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: 07/01/2011
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: 742, water well: 5822, depth to ground water: 40
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 Encana Oil & Gas (USA) Inc. owns surface. Location was on-sited with the BLM 11/8/2010. Distances in the cultural section are taken from SG 8505D-24 L24 496. The location will be reclaimed in reference to the area to the east of the location. Reference area photos will be submitted at a later time.

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

Signed: _____ Date: 10/18/2011 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: 11/15/2011

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.

SITE SPECIFIC COAs:

Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling, completion, and injection 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.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface or buried pipelines.

The nearby hillside must be monitored for any day-lighting of fluids throughout drilling operations.

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.

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 |
|-------------|------------------------|
| 2034058 | CORRESPONDENCE |
| 400210929 | FORM 2A SUBMITTED |
| 400213505 | NRCS MAP UNIT DESC |
| 400213507 | MULTI-WELL PLAN |
| 400213592 | HYDROLOGY MAP |
| 400215777 | LOCATION DRAWING |
| 400215782 | ACCESS ROAD MAP |
| 400215785 | CONST. LAYOUT DRAWINGS |
| 400215786 | LOCATION PICTURES |

Total Attach: 9 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------------|
| Permit | CPW comments addressed by Encana's WMP. LGD/pub. comments waived. Final Comprehensive Review Status--passed. | 11/15/2011 10:30:14 AM |
| Permit | added related APD's. ready to approve in permitting. | 10/28/2011 10:32:01 AM |
| OGLA | Initiated/Completed OGLA Form 2A review on 10-27-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, moisture content cuttings, and flowback to tanks COAs from operator on 10-27-11; received acknowledgement of COAs from operator on 11-02-11; changed distance to SW to 742'; passed by CDPW on 10-19-11 with operator WMP and BLM COAs and stipulations acceptable; passed OGLA Form 2A review on 11-14-11 by Dave Kubeczko; fluid containment, spill/release BMPs, moisture content cuttings, and flowback to tanks COAs. | 10/27/2011 6:26:55 PM |
| DOW | This well pad is located within the boundary of the Encana-CPW Wildlife Mitigation Plan. The BMPs and terms and conditions of the plan are applicable to the site. Wednesday, October 19, 2011 at 4:57 p.m. | 10/19/2011 4:57:43 PM |

Total: 4 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. • Maintain a minimum of five feet of soil cover between the pipeline and the lowest point of the drainage or water body channel. |
| 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. • 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)