

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:

400380289

Date Received:

02/28/2013

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:

**433168**

Expiration Date:

**06/04/2016**

☒ 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: Erin Hochstetler  
Phone: (720) 876-5827  
Fax: ( )  
email: erin.hochstetler@encana.com

4. Location Identification:

Name: State SW Number: 3-16H Pad  
County: WELD  
QuarterQuarter: NWSW Section: 16 Township: 3N Range: 68W Meridian: 6 Ground Elevation: 5059  
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: 1330 feet FSL, from North or South section line, and 257 feet FWL, from East or West section line.  
Latitude: 40.222180 Longitude: -105.016400 PDOP Reading: 1.7 Date of Measurement: 12/12/2012  
Instrument Operator's Name: JOHN RICE

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

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="8"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="8"/>	Separators: <input type="text" value="8"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="8"/>	Oil Tanks: <input type="text" value="24"/>	Fuel Tanks: <input type="text"/>	

Other: IN ADDITION: 2 METERS, 8 BUFFER VESSELS & 4 VRUs

6. Construction:

Date planned to commence construction: 04/10/2013 Size of disturbed area during construction in acres: 10.00  
Estimated date that interim reclamation will begin: 08/12/2013 Size of location after interim reclamation in acres: 4.00  
Estimated post-construction ground elevation: 5059 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: \_\_\_\_\_

## 7. Surface Owner:

Name: NRC-CO-1 Phone: 210-821-6523  
Address: 755 E. Mulberry Ave Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: San Antonio State: TX Zip: 78212 Date of Rule 306 surface owner consultation: 11/26/2012  
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 20090011

## 8. Reclamation Financial Assurance:

☒ Well Surety ID: 20100017 ☐ 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: 794, public road: 245, above ground utility: 230,  
railroad: 2898, property line: 257

## 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 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: Wiley-Colby Complex, 1 to 3 percent slopes

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: 2268, water well: 4438, depth to ground water: 7

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:

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

Signed: \_\_\_\_\_ Date: 02/28/2013 Email: erin.hochstetler@encana.com

Print Name: Erin Hochstetler Title: Permitting Technician

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: 6/5/2013

**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.**

The tank battery shall not exceed 24 total tanks.

The operator shall provide a schedule to the Town of Mead and pledge their best efforts to not schedule rig moves and to minimize drilling activities high traffic and high impact activities on Thanksgiving Day and the day after Thanksgiving and the day before Christmas and Christmas Day.

The location shall be accessed using Hwy 66 to WCR 5 then north to the access road.

**Attachment Check List**

Att Doc Num	Name
1638213	CORRESPONDENCE
2086267	CORRESPONDENCE
400380289	FORM 2A SUBMITTED
400381139	NRCS MAP UNIT DESC
400381141	HYDROLOGY MAP
400381142	LOCATION PICTURES
400381143	LOCATION DRAWING
400381144	WASTE MANAGEMENT PLAN
400386289	ACCESS ROAD MAP
400386293	MULTI-WELL PLAN

Total Attach: 10 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final Review Completed. LGD comment addressed (see COA's on form 2A); no public comment received.	5/30/2013 3:52:19 PM
OGLA	Attached letter detailing operation of this location as agreed by Operator and the Town of Mead.	5/30/2013 12:04:06 PM
Permit	Surface Restoration Bond on file with SLB; per Tim Kelly. ok to pass.	3/25/2013 8:56:13 AM
Permit	attached comment letter from Dan Dean, Town Manager, Town of Mead	3/21/2013 2:53:26 PM
LGD	<p>The Town of Mead is in receipt of COGCC notification of applications for oil and gas facilities to be located on state land adjacent Weld County Road 5 which is a Town of Mead, street. The proposed wells will be located in the SW Quarter of Section 16 T3N R68W. While these are not in the Town of Mead they will impact the Town of Mead and our streets. Therefore, we submit the following comments:</p> <p>a. The permit holder is responsible for the drilling, completion, operation, and abandonment of the well and appurtenant facilities and the restoration of the site in accordance with the regulations of the Colorado Oil and Gas Commission.</p> <p>b. Building permits. Building permits must be obtained for all aboveground structures to which the International Building Code applies. All structures subject to a building permit shall be charged the appropriate local use tax as provided by law.</p> <p>c. Production facilities.</p> <p>i. Production facilities shall be located and landscaped in accordance with an</p>	3/21/2013 8:43:32 AM

	<p>approved site plan and landscaping plan.</p> <p>ii. The tank battery shall consist of low-profile 300 barrel tanks. The wellhead, the tank battery and separators will be painted a beige/tan color (NORTHERN CLIMB C14-2 DUTCH BOY) to blend into the surrounding area and vegetation.</p> <p>iii. Landscaping shall be installed not less than 180 days following the installation of the production facilities.</p> <p>d. Notice required for installation of additional equipment. The permit is limited to the facilities as shown in an approved plan. To the extent the applicant desires, after initial completion of a well, to place additional equipment on a tank battery or wellhead location which was not shown in the approved plan, the applicant must, except in a situation where additional equipment is necessary for a period of fourteen (14) days or less, notify the Town of installation of such additional equipment.</p> <p>e. Transportation route for drilling equipment, EP waste products and produced fluids. If the transportation route will include any Town streets or Roads, the operator shall submit a proposed traffic plan to the Town of Mead for approval.</p> <p>f. Access roads. All private roads used to provide access to the tank batteries or the Wells site shall be improved and maintained according to the standards contained in Section 16-10-111 Mead Municipal Code. Access to the well site is subject to a separate Town of Mead Street, Driveway, and Culvert Permit. The well site access road shall be improved from the point of connection to a street for a minimum distance of 200 feet on the access road. The access road shall be improved as a hard surface (concrete or asphalt) for the first 100 feet from the street, and then improved as a crushed surface (concrete or asphalt) for 100 feet past the hard surface in the appropriate depth to support the weight load requirements of the vehicles accessing the well and production facilities. If an access road intersects with a pedestrian trailer walk, the access road shall be paved, as a hard surface (concrete or asphalt) for 100 feet either side of the trail or walk, and, if necessary, replace the trailer walk to address the weight load requirements of the vehicles accessing the well and production facilities.</p> <p>g. Dust abatement on transportation route and access roads. The operator shall apply a 5% Magnesium Chloride solution to the graveled portions of the transportation route and access road, as a dust control measure before the commencement of drilling operations. Application methods and rates shall be at the direction of the Town. Additional applications of Magnesium Chloride shall be made at the direction of the Town.</p> <p>h. Maintenance of transportation route and access roads. The operator shall monitor and maintain (dust control and grading to eliminate ruts and wash-boarding) of the gravel portions the transportation route and access road, during the preparation for drilling, the well drilling and completion phases, and during the plugging and abandonment phases, of the well, all to the satisfaction of the Town.</p> <p>i. Oversized or overweight vehicle or load permit. An oversize or overweight vehicle or load permit shall be required for all oversize or overweight vehicles or loads as defined in Sections 42-4-501 through 42-4-511, C.R.S., which use Town streets. Said permit, if required, shall be obtained from the Town prior to such use. The applicant shall comply with all Town and state regulations regarding weight limitations on streets within the Town, and the applicant shall minimize oversize or overweight vehicle traffic on streets within the Town.</p> <p>j. Pitless (closed loop) systems. Notwithstanding any regulations of the Colorado Oil Gas Conservation Commission (COGCC) to the contrary, no natural or man-made depressions in the ground shall be used to hold fluids or muds during drilling, reworking or production operations. All fluids, muds and gas brought to the surface shall be contained in enclosed, impervious steel, fiberglass or concrete tanks (sumps) as a closed loop system. Such tanks (sumps) and their contents shall be removed from the premises and the drilling site within sixty (60) days after completion of the well and disposed of at a permitted off-site disposal area approved</p>		
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	<p>by the COGCC, in accordance with COGCC regulations. During production, E P waste shall be stored in impervious steel, fiberglass or concrete tanks (sumps) and removed and disposed of at a permitted off-site disposal area approved by the COGCC, in accordance with the COGCC regulations.</p> <p>k. Timing of Drilling Operations. The operator shall provide a drilling schedule to the Town of Mead and pledge their best efforts to not schedule drilling activities on Thanksgiving Day and the day after Thanksgiving and the day before Christmas and Christmas Day. The operator agrees to give the Town and adjacent property owners, within 300 feet of the drill site, notification not less than thirty (30) days before commencing drilling operations.</p> <p>l. Fencing requirements. At the time of initial installation, all pumps, pits, wellheads, and production facilities shall be adequately fenced to restrict access by unauthorized persons. For security purposes, all such facilities and equipment used in the operation of a completed well shall be surrounded by wrought iron fencing, or Ameristar Impasse, or Stronghold fencing, or an approved equivalent. The fencing color shall be black or bronze, six (6) feet in height, constructed in conformance with local written standards. The gate shall be compatible with the fence and shall be provided with a combination catch and locking attachment device for a padlock, and shall be kept locked except when being used for access to the site. The operator must provide the Chief of the Mountain View Fire Protection District with a Knox Padlock or Knox Box with a key, to access the well site in case of an emergency.</p> <p>m. Emergency response costs. The operator shall reimburse the Town or the fire protection district for any emergency response costs incurred by the Town or the fire district in connection with activity at the well site or production site, except that the operator shall not be required to pay for emergency response costs where the response was precipitated by the mistake of the Town.</p> <p>n. Compliance with state environmental requirements. The approval of an oil and gas permit shall not relieve the operators from complying with all current applicable state and federal regulations and standards concerning air quality, water quality and waste disposal.</p> <p>o. Geologic hazard, floodplain, floodway location restrictions. All equipment at well sites and production sites in geological hazard and floodplain areas shall be anchored to the extent necessary to resist flotation, collapse, lateral movement or subsidence and to the extent necessary to comply with the Federal Emergency Management Act.</p> <p>p. Wildlife impact mitigation.</p> <p>i. Wildlife. When a well site or production site is located within or adjacent to a wildlife or natural area, the applicant shall consult with the State Division of Wildlife to obtain recommendations for appropriate site specific and cumulative impact mitigation procedures. The operator shall implement such mitigation procedures as are recommended by State Division of Wildlife after consultation with the Town. The operator shall file a mitigation plan with the Town.</p> <p>ii. Endangered species. The applicant shall not engage in activities which, in the opinion of the State Division of Wildlife, threaten endangered species.</p> <p>iii. Nesting Raptors. The applicant shall not engage in activities which, in the opinion of the State Division of Wildlife, disturb raptors during critical nesting times.</p> <p>q. Lighting. The site lighting shall be directed downward and internally during drilling and post-drilling operations so as to avoid glare on public roads and building units within seven (700) hundred feet.</p> <p>r. Sound mitigation. Oil and gas operations at the well site and production facility shall comply with COGCC Rule 802, noise abatement regulations.</p> <p>s. Vapor recovery unit. The Vapor Recovery Unit (VRU) shall conform to noise standards set by COGCC.</p>		
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Permit	Emailed Tim Kelly and Sherry Lee at SLB for verification of Surface Restoration Bond.	3/12/2013 10:10:42 AM
OGLA	Reviewed 3/6/2013.	3/6/2013 10:39:08 AM
Permit	This form has passed completeness.	3/1/2013 11:31:41 AM

Total: 8 comment(s)

### **BMP**

Type

Comment

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