

FORM
2A

Rev
08/13

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:

400601645

Date Received:

05/29/2014

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: _____

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location 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. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

438162

Expiration Date:

07/17/2017

This location assessment is included as part of a permit application.

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.

Operator

Operator Number: 100185
 Name: ENCANA OIL & GAS (USA) INC
 Address: 370 17TH ST STE 1700
 City: DENVER State: CO Zip: 80202-5632

Contact Information

Name: Bonnie Lamond
 Phone: (720) 876-5156
 Fax: ()
 email: bonnie.lamond@encana.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20100017 Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Dale Facilities Number: 20H-O264
 County: WELD
 Quarter: NWSE Section: 20 Township: 2N Range: 64W Meridian: 6 Ground Elevation: 4933

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1993 feet FSL from North or South section line
2503 feet FEL from East or West section line

Latitude: 40.122181 Longitude: -104.574594

PDOP Reading: 2.3 Date of Measurement: 04/10/2014

Instrument Operator's Name: C. Bettencourt

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

Production Facilities Location serves Well(s)

329864

400601641

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	_____	Oil Tanks	<u>24</u>	Condensate Tanks	_____	Water Tanks	<u>6</u>	Buried Produced Water Vaults	_____
Drilling Pits	_____	Production Pits	_____	Special Purpose Pits	_____	Multi-Well Pits	_____	Temporary Large Volume Above Ground Tanks	_____
Pump Jacks	_____	Separators	<u>12</u>	Injection Pumps	_____	Cavity Pumps	_____		
Gas or Diesel Motors	_____	Electric Motors	_____	Electric Generators	_____	Fuel Tanks	_____	Gas Compressors	_____
Dehydrator Units	_____	Vapor Recovery Unit	<u>8</u>	VOC Combustor	<u>13</u>	Flare	_____	LACT Unit	_____
								Pigging Station	_____

OTHER FACILITIES

Other Facility Type

Number

<u>Other Facility Type</u>	<u>Number</u>

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Equipment counts con't: VRT = 1, buffer vessel = 1

CONSTRUCTION

Date planned to commence construction: 09/01/2014 Size of disturbed area during construction in acres: 10.50
Estimated date that interim reclamation will begin: 09/01/2015 Size of location after interim reclamation in acres: 6.00
Estimated post-construction ground elevation: 4933

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Keller Family LLLP Phone: _____
 Address: 14802 West 44th Ave. Fax: _____
 Address: _____ Email: _____
 City: Golden State: CO Zip: 80403
 Surface Owner: Fee State Federal Indian
 Check all that apply. The Surface Owner: is the mineral owner
 is committed to an oil and Gas Lease
 has signed the Oil and Gas Lease
 is the applicant
 The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian
 The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes
 The right to construct this Oil and Gas Location is granted by: oil and gas lease
 Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____
 Date of Rule 306 surface owner consultation _____

CURRENT AND FUTURE LAND USE

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

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

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2115 Feet
Building Unit: 2126 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1993 Feet
Above Ground Utility: 1960 Feet
Railroad: 4697 Feet
Property Line: 146 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: Buffer Zone
 Exception Zone
 Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____
Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SOIL

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.org/> 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: Colby loam, 1 to 3 percent slopes
NRCS Map Unit Name: _____
NRCS Map Unit Name: _____

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): _____

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 3377 Feet

water well: 2517 Feet

Estimated depth to ground water at Oil and Gas Location 20 Feet

Basis for depth to groundwater and sensitive area determination:

Basis for depth to groundwater and sensitive area determination is from Division of Water Resources Water Well Data.

Is the location in a riparian area: No Yes

Was an Army Corps of Engineers Section 404 permit filed No Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No 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: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

RULE 502.b VARIANCE REQUEST

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

Reference area is to the north. A temporary completions area, operated by a 3rd party, approximately four acres will be utilized for up to 3 fresh water storage tanks to be used during completions operations just south of the facilities pad. This area will be completely reclaimed. Please see attached map.

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

Signed: _____ Date: 05/29/2014 Email: bonnie.lamond@encana.com

Print Name: Bonnie Lamond 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: 7/18/2014

Conditions Of Approval

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.

<u>COA Type</u>	<u>Description</u>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	General Housekeeping	Any material not in use that might constitute a fire hazard will be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area will comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.
2	General Housekeeping	All surface trash, debris, scrap or discarded material connected with the operations of the property shall be removed from the premises or disposed of in a legal manner.
3	Material Handling and Spill Prevention	<ul style="list-style-type: none">• Annual hydrostatic test on the oil dump line from the separator to the tank battery.• Annual hydrostatic "static" tests on our oil tanks.• Annual hydrostatic "static" tests on our produced water tank and water dump line from the separator to the produced water tank.• Lease Operator inspections of all equipment not to exceed 48 hours.• Monthly documented inspections (EU).• Annual environmental inspections of all battery and well equipment and pads.• Annual UT inspections of the pressure vessels and input into Encana's RIPL Predictive Integrity Maintenance Program. (HLP separators and fuel gas separators)
4	Material Handling and Spill Prevention	Well effluent containing more than ten (10) barrels per day of condensate or within two (2) hours after first encountering hydrocarbon gas of salable quality will be directed to a combination of sand traps, separators, surge vessels, and tanks as needed to ensure safe separation of sand, hydrocarbon liquids, water, and gas and to ensure salable products are efficiently recovered for sale or conserved and that non-salable products are disposed of in a safe and environmentally responsible manner.
5	Construction	The pad will be constructed in such a manner that noise mitigation may be installed and removed without disturbing the site or landscaping.
6	Construction	Subject pad will have all weather access roads to allow for operator and emergency response.
7	Construction	Encana utilizes 24" tall corrugated galvanized metal berm walls with a capacity in excess of 150% of the largest tank contained within the wall. In addition, Encana best practices mandates the use of impervious liners that extends under each storage tank and up the walls, permanently affixed to the top of the metal berm wall. Protrusions of piping that come through the liner include a fully sealed "boot" to prevent leakage.
8	Construction	Encana will install fencing to restrict access to wellheads and equipment.
9	Construction	At the time of construction, all leasehold roads will be constructed to accommodate local emergency vehicle access requirements, and will be maintained in a reasonable condition.

10	Noise mitigation	Encana will perform a baseline noise survey prior to any operational activity measuring dBA at a distance 350 feet from the noise source (unless there is an occupied structure closer than that – then measurement will be taken 25 feet from the structure). If low frequency noise is a concern, measurement of dBC will be taken 25 feet from the occupied structure towards the noise source. As necessary, based on the survey, Encana will install temporary sound walls to minimize noise and light impacts during drilling and completions and will install permanent noise mitigation at the facility location as necessary to meet all COGCC regulations.
11	Noise mitigation	The subject location will be constructed to allow potential future noise mitigation installation without disturbance.
12	Emissions mitigation	Flow lines, separators, and sand traps capable of supporting green completions as described in Rule 805 will be installed on subject location at which commercial quantities of gas are reasonably expected to be produced based on existing adjacent wells within 1 mile.
13	Emissions mitigation	Temporary flowback flaring and oxidizing equipment will include: adequately sized equipment to handle 1.5 times the largest flowback volume of gas experienced in a ten mile radius. If there is overrun, Encana will shut in the well versus freely venting
14	Drilling/Completion Operations	All newly installed or replaced crude oil and condensate storage tanks will be designed, constructed, and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). Encana will maintain written records verifying proper design, construction, and maintenance, and will make these records available for inspection by the Director. In addition, onsite inspections are conducted internally to insure guidelines are met.
15	Drilling/Completion Operations	Encana will not utilize pits.

Total: 15 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400601645	FORM 2A SUBMITTED
400606980	LOCATION DRAWING
400606993	NRCS MAP UNIT DESC
400606994	OTHER
400606997	ACCESS ROAD MAP
400606999	OTHER
400614151	WASTE MANAGEMENT PLAN
400614722	HYDROLOGY MAP
400616910	EXCEPTION LOC WAIVERS
400628741	LOCATION PICTURES
400696275	EXCEPTION LOC REQUEST

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	7/17/2014 12:08:17 PM
Permit	Received and attached a request to Rule 603.a. Property line.	7/17/2014 12:08:13 PM
Permit	Unchecked "This location assessment is included as part of a permit application." The Certification of Compliance with Rule 305.a is under other. ON HOLD: requesting Exception location letter for property line.	7/15/2014 3:57:26 PM
OGLA	Added location ID 329864 to the list that this production facility serves as shown on the Exhibit "A" (other). Review completed 7/7/2014.	7/7/2014 10:39:34 AM
Permit	Passed completeness. Well location information is now correct. Location pictures PDF now opens.	6/18/2014 12:58:01 PM
Permit	Return to draft: 1. Lat/long provided puts location in NWSE, but qtr/qtr provided is SWSE 2. Elevation provided does not match reference point elevation 3. Location pictures PDF does not open.	5/29/2014 4:52:16 PM

Total: 6 comment(s)