

State 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:

400060081

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 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:

421390

Expiration Date:

01/30/2014
☐ 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: MIRACLE PFISTER
 Phone: (720) 876-3761
 Fax: (720) 876-6060
 email: miracle.pfister@encana.com

4. Location Identification:

Name: Twin Creek Number: 12-6C1 (F12E)
 County: GARFIELD
 Quarter: SE Section: 12 Township: 7S Range: 92W Meridian: 6 Ground Elevation: 6144
 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: 2538 feet FNL, from North or South section line, and 1602 feet FWL, from East or West section line.
 Latitude: 39.462020 Longitude: -107.618810 PDOP Reading: 0.0 Date of Measurement: 08/13/2008
 Instrument Operator's Name: TED TAGGART

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

Special Purpose Pits: <input type="text" value="1"/>	Drilling Pits: <input type="text" value="0"/>	Wells: <input type="text" value="10"/>	Production Pits: <input type="text" value="0"/>	Dehydrator Units: <input type="text" value="0"/>
Condensate Tanks: <input type="text" value="0"/>	Water Tanks: <input type="text" value="0"/>	Separators: <input type="text" value="10"/>	Electric Motors: <input type="text" value="0"/>	Multi-Well Pits: <input type="text" value="0"/>
Gas or Diesel Motors: <input type="text" value="0"/>	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="0"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text" value="0"/>	Water Pipeline: <input type="text" value="1"/>	Flare: <input type="text" value="0"/>
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="0"/>	

Other: A CUTTINGS AREA TO MIX DRILL CUTTINGS WILL BE USED.

6. Construction:

Date planned to commence construction: 07/01/2010 Size of disturbed area during construction in acres: 5.36
Estimated date that interim reclamation will begin: 07/01/2012 Size of location after interim reclamation in acres: 1.39
Estimated post-construction ground elevation: 6144 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: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 08/13/2008
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: 20100017 ☐ 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: 1704, public road: 1056, above ground utilit: 22176
, railroad: 30096, property line: 306

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: #55, Potts Loam 3-6%

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 (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: 696, water well: 386, depth to ground water: 30

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:

The reference area is adjacent to the pad looking towards the east. No reference area map is required. Reference area pictures have been attached. The depth to ground water was taken from a well 465' to the east.

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

Signed: _____ Date: 05/06/2010 Email: miracle.pfister@encana.com

Print Name: Miracle Pfister 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.

David S. Neslin

COGCC Approved: _____ Director of COGCC Date: 1/31/2011

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.

Operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations. If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of fluids.

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 a domestic water well; therefore either a lined drilling pit or closed loop system must be implemented.

Location is in a sensitive area because of proximity to a domestic water well; therefore production pits (if constructed) must be lined.

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.

Attachment Check List

Att Doc Num	Name
1637987	CORRESPONDENCE
2033111	NRCS MAP UNIT DESC
2033149	CORRESPONDENCE
400060081	FORM 2A SUBMITTED
400060132	REFERENCE AREA PICTURES
400060133	LOCATION DRAWING
400060134	HYDROLOGY MAP
400060135	ACCESS ROAD MAP
400060136	LOCATION PICTURES
400060137	NRCS MAP UNIT DESC
400060138	CONST. LAYOUT DRAWINGS
400060139	MULTI-WELL PLAN
400060141	PROPOSED BMPs

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Agency	After study of drilling and electric log records of previously drilled wells the permits for this pad are to be approved with specific conditions of approval. These conditions of approval were formulated as a result of these studies to ensure that highest level of protection during the drilling and through the life of the well.	1/31/2011 4:27:21 PM
DOW	The BMPs, as submitted by the operator, are sufficient for the site. by Michael Warren on Tuesday, June 15, 2010 at 3:00 P.M.	8/16/2010 2:15:10 PM
Permit	WO LETTER RESPONSE. MAMM CREEK ISSUE DO NOT PROCESS AT THIS TIME ; Initiated/Completed OGLA Form 2A review on 05-15-10 by Dave Kubeczko; requested clarifications and acknowledgement of close water well lined pit/closed loop, fluid containment, spill/release BMPs, lined pits, cuttings low moisture content, no pit in fill COAs from operator on 05-15-10; received clarifications and acknowledgement of COAs from operator on 05-25-10; passed by CDOW on 06-15-10, with operator submitted (with permit application) BMPs acceptable; passed OGLA Form 2A review on 06-21-10 by Dave Kubeczko; fluid containment, spill/release BMPs, lined pits, cuttings low moisture content COAs; put ON HOLD waiting for information to address Lisa Bracken's public comment.	

Total: 3 comment(s)

BMP

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

Total: 0 comment(s)