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

Oil and Gas Location Assessment

Document Number: 400309793

Date Received: 07/31/2012

☐ New Location ☒ Amend Existing Location Location#: 334270

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: **334270**

Expiration Date: **10/04/2015**

☐ 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) 876-4861

email: miracle.pfister@encana.com

4. Location Identification:

Name: J25W Water Storage Pit Number: 1

County: GARFIELD

QuarterQuarter: NWSE Section: 25 Township: 7S Range: 93W Meridian: 6 Ground Elevation: 6662

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: 1618 feet FSL , from North or South section line, and 1964 feet FEL , from East or West section line.

Latitude: 39.414442 Longitude: -107.721079 PDOP Reading: 1.7 Date of Measurement: 07/16/2012

Instrument Operator's Name: Jason Hergert

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

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

Other:

6. Construction:

Date planned to commence construction: 08/30/2012 Size of disturbed area during construction in acres: 3.30

Estimated date that interim reclamation will begin: 08/31/2013 Size of location after interim reclamation in acres: 3.30

Estimated post-construction ground elevation: 6662 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: 06/24/2007

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: 20090011 ☐ 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: 3150 , public road: 2800 , above ground utilit: 3300

, railroad: 43000 , property line: 1500

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: #7 Ascalon-Pena complex, 6 to 25 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: 470 , water well: 4580 , depth to ground water: 120

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 Suppl 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:

A reference area map is not attached because the reference area is adjacent to the pad to the west direction. The depth to ground water is greater >120 feet based on the surrounding water wells to the north and east.

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

Signed: Date: 07/31/2012 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.

COGCC Approved: **Director of COGCC** Date: 10/5/2012

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.

FORM 15 EARTHEN PIT PERMIT COAs:

Notify the COGCC 48 hours prior to start of pad construction, pit liner installation, and start of pit operations using Form 42 (the appropriate COGCC individuals will automatically be email notified).

The Form 15 Earthen Pit Permit shall be good for 3 years from the date of first use. If the produced water storage pit is to be used for more than 3 years, the operator shall file with the COGCC an application on Form 28 and obtain the COGCC's approval.

The produced water storage pit must be double-lined. The pit will also require a leak detection system (Rule 904.e).

Operator shall submit as-built pit design report including pit layout (plan view and cross-sections), sub-grade preparation, liner installation QA/QC, and any testing results within 90 days of completion of pit installation.

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface pipelines or configuration of the permanent pipeline network.

After installation of the uppermost liner and prior to operating the pit, the synthetic liner(s) shall be tested by filling the pit with at least 70 percent of operating capacity of water, measured from the base of the pit (not to exceed the 2-foot freeboard requirement). The operator shall monitor the pit for leaks for a period of 72 hours prior to draining the pit and commencing operations. The leak detection system must also be monitored during the entire test. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) 48 hours prior to start of the hydrotest. Hydrotest monitoring results must be maintained by the operator for the life of the pit and provided to COGCC prior to using the pit.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline leading to the produced water storage pit.

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 approval of the Form 15 Earthen Pit Permit. 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 produced water storage pit must be fenced and netted. The operator must maintain the fencing and netting until the pit is closed.

The operator shall submit, and receive approval of, a reuse and recycling plan per Rule 907.a.(3), prior to any offsite reuse/recycling of pit fluids.

Submit additional disposal facilities (wells, pits, etc.), if necessary (i.e., if original disposal option changes), for pit liquid contents to COGCC via a Form 4 Sundry prior to disposal.

The produced water storage pit shall be closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels; with an approved Site Investigation and Remediation Workplan, Form 27.

SITE SPECIFIC (FORM 2A) COAs:

Operator must ensure 110 percent secondary containment for any volume of fluids (excluding freshwater) 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., 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 buried or temporary surface pipelines.

A form 15 Earthen Pit Permit must be submitted and approved prior to construction/use of the completions pit.

Attachment Check List

Att Doc Num	Name
1293007	CORRESPONDENCE
400309793	FORM 2A SUBMITTED
400311143	ACCESS ROAD MAP
400311144	CONST. LAYOUT DRAWINGS
400311145	HYDROLOGY MAP
400311147	LOCATION PICTURES
400311148	LOCATION DRAWING
400311151	REFERENCE AREA PICTURES
400311152	NRCS MAP UNIT DESC
400311157	SURFACE AGRMT/SURETY

Total Attach: 10 Files

General Comments

User Group	Comment	Comment Date
Permit	No LGD or public comments. Final Review--passed.	10/3/2012 11:44:33 AM
OGLA	Initiated/Completed OGLA Form 2A and Form 15 (400311134) review on 09-21-12 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, stormwater BMPs, lined pit, leak detection, no pit in fill, Form 15, hydrotest, as-builts, pit closure, pit fencing/netting, and flowback to tanks COAs from operator on 09-21-12; received acknowledgement of COAs from operator on 09-24-12; passed by CPW on 08-13-12 with operator submitted BMPs acceptable; passed OGLA Form 2A review and Form 15 review on 10-03-12 by Dave Kubeczko; fluid containment, spill/release BMPs, stormwater BMPs, lined pit, leak detection, no pit in fill, Form 15, hydrotest, as-builts, pit closure, pit fencing/netting, and flowback to tanks COAs.	9/21/2012 12:44:51 PM
Permit	Producing MVRD well currently SI on this location.	8/20/2012 7:10:18 AM
DOW	The Wildlife BMPs submitted with the Form 2A application are appropriate with the following additions: Pit fencing should consist of a minimum seven foot high fence constructed of material strong enough and in such configuration as to prohibit deer and elk from entering the pit; concurrently it should functionally prohibit small mammals (rabbits or rodents) from entering the pit through the fence. This may require a second type of fencing (such as chicken wire or equivalent) to be wrapped around the taller fence and buried one foot below grade and extend two feet above grade. Pit netting should be constructed to exclude birds and/or waterfowl from entering. Notify CPW immediately if any wildlife is found in netting, fencing, or the pit.	8/13/2012 3:49:41 PM
LGD	Passed DB	8/6/2012 10:59:09 AM

Total: 5 comment(s)

BMP

Type	Comment
Wildlife	Wildlife BMPs Minimize the number, length and footprint of oil & gas development roads Use existing routes where possible Combine utility infrastructure planning (gas, electric & water) when possible with roadway planning to avoid separate utility corridors Coordinate Employee transport when possible Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors. Maximize use of state-of-the-art drilling technology (e.g., high efficiency rigs, coiled-tubing unit rigs, closed-loop or pitless drilling, etc.) to minimize disturbance. Reclaim mule deer and elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed. Area around pond will be fenced. Pond will have cover.
Site Specific	POST CONSTRUCTION/RECLAMATION Maintenance Revegetation Monitoring BMP maintenance & monitoring Weed Management Area around pond will be fenced
Construction	CONSTRUCTION/RECLAMATION (Not all are used all the time) Terminal Containment, Diversions, Run-On Protection, Tracking, Benching, Terracing, ECM (Erosion Control Mulch), ECB (Erosion Control Blanket), Check Dams, Seeding, Mulching, Water Bars, Stabilized Unpaved Surfaces (Gravel), Stormwater & Snow Storage Containment, Scheduling, Phased Construction, Temporary Flumes, Culverts with inlet & outlet protection, Rip Rap, TRM (Turf Reinforcement Mats), Maintenance, Scheduling, Phased Construction, Fueling BMP's, Waste Management BMP's, Materials Handling BMP's
Pre-Construction	PRECONSTRUCTION Wattles, Silt Fence, Vegetation Buffers, Slash, Topsoil Windrows (diversions & ROP's), Scheduling, Phased Construction

Total: 4 comment(s)