

**FORM  
2A**Rev  
04/01**State of Colorado  
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



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Document Number:

400210339

**Oil and Gas Location Assessment**☐ New Location☒ Amend Existing Location Location#: 311692

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:

**311692**

Expiration Date:

**11/16/2014**☒ 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: 100185Name: ENCANA OIL & GAS (USA) INCAddress: 370 17TH ST STE 1700City: DENVER State: CO Zip: 80202-5632**3. Contact Information**Name: Jevin CroteauPhone: (720) 876-5339Fax: (720) 876-6339email: jevin.croteau@encana.com**4. Location Identification:**Name: Gardner FederalNumber: 28-1 (PC-28)County: GARFIELDQuarterQuarter: LOT 3 Section: 28 Township: 7S Range: 95W Meridian: 6 Ground Elevation: 6420

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: 72 feet FNL, from North or South section line, and 2373 feet FWL, from East or West section line.Latitude: 39.415586 Longitude: -108.003227 PDOP Reading: 0.0 Date of Measurement: 08/11/2010Instrument 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="checkbox"/>	Drilling Pits:	<input type="checkbox"/>	Wells:	<input type="text" value="12"/>	Production Pits:	<input type="checkbox"/>	Dehydrator Units:	<input type="checkbox"/>
Condensate Tanks:	<input type="text" value="4"/>	Water Tanks:	<input type="checkbox"/>	Separators:	<input type="text" value="12"/>	Electric Motors:	<input type="checkbox"/>	Multi-Well Pits:	<input type="checkbox"/>
Gas or Diesel Motors:	<input type="checkbox"/>	Cavity Pumps:	<input type="checkbox"/>	LACT Unit:	<input type="checkbox"/>	Pump Jacks:	<input type="checkbox"/>	Pigging Station:	<input type="text" value="1"/>
Electric Generators:	<input type="checkbox"/>	Gas Pipeline:	<input type="text" value="1"/>	Oil Pipeline:	<input type="checkbox"/>	Water Pipeline:	<input type="checkbox"/>	Flare:	<input type="checkbox"/>
Gas Compressors:	<input type="checkbox"/>	VOC Combustor:	<input type="checkbox"/>	Oil Tanks:	<input type="checkbox"/>	Fuel Tanks:	<input type="checkbox"/>		

Other: There are two existing wells, 21-15 & 21-13 and we plan to add 10 additional wells and the facilities listed above.**6. Construction:**

Date planned to commence construction: 03/01/2012 Size of disturbed area during construction in acres: 6.35  
Estimated date that interim reclamation will begin: 09/01/2012 Size of location after interim reclamation in acres: 1.60  
Estimated post-construction ground elevation: 6420 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: 05/05/2011  
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 Mgmt. Surety ID: \_\_\_\_\_

## 9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒  
Distance, in feet, to nearest building: 5500, public road: 8000, above ground utilit: 2600  
, railroad: 18600, property line: 245

## 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: 71 - Villa Grove-Zoltay loams, 15 to 30 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: Gambel oak, Utah serviceberry, Elk sedge, Mountain brome, Western wheatgrass & Mountain snowberry.

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: 260, water well: 4070, depth to ground water: 90

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:

According to the CO DWR website the nearest water well, permit # 119549-A, is 4,070' away and has a static water level of 90'. All distances and the single point as a location reference for this location is measured from the proposed Gardner Federal 28-1 (PC-28) well stake. The reference area for this location will be adjacent to the north side of the pad.

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

Signed: \_\_\_\_\_ Date: 10/06/2011 Email: jevin.croteau@encana.com

Print Name: Jevin Croteau 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: 11/17/2011

**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.**

**PROJECT RULISON COAs:**

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

Comply with all DOE Office of Legacy Management requests for sampling and analysis of natural gas and other materials associated with drilling and production.

The nearby hillside must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval.

Operator must ensure secondary containment for any volume of fluids 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.

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.

Berms or other containment devices shall be constructed to be sufficiently impervious to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

Produced water from this location may not be transported to or re-used at another location without specific written approval from COGCC and only after analysis confirms compliance with the Rulison Sampling and Analysis Plan (SAP).

Drill solids and cuttings from this location may not be transported to, disposed of or re-used at another location without specific written approval from COGCC and only after analysis confirms compliance with the Rulison Sampling and Analysis Plan (SAP).

A closed loop mud system shall be utilized to ensure containment of all materials that have been in contact with downhole strata and fluids. All cuttings and fresh make up water storage pits shall be lined to ensure containment. Contour features, french drains and other stormwater BMPs as necessary shall be employed to ensure site integrity.

No individual operator shall utilize more than one rig within one mile of the Project Rulison blast site at any given time and no individual operator shall utilize more than two rigs within a three mile radius of the site at any given time. The total number of rigs allowed by all operators within three miles of the site shall be limited to five at any given time.

Operator shall comply with all provisions of the most recent COGCC approved revision of the Rulison Sampling and Analysis Plan (SAP). In addition to the produced water sampling and analysis outlined in section 5.8 of the plan the operators shall also obtain and analyze produced water samples on wells described in the plan for constituents listed in the plan using the specified method where applicable.

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.

Operator will conduct regular inspections of equipment for leaks and equipment problems with appropriate documentation retained in the operator's office. All equipment deficiencies shall be corrected. Monitoring should end approximately 30 days after well completion and/or after production has been stabilized; however, timely inspections should continue during the production phase.

Operator will use adequately sized containment devices for all chemicals and/or hazardous materials stored or used on location.

Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

### Attachment Check List

Att Doc Num	Name
2034062	CORRESPONDENCE
400210339	FORM 2A SUBMITTED
400210372	HYDROLOGY MAP
400210375	SECTION 404 PERMIT
400210380	LOCATION DRAWING
400210381	LOCATION PICTURES
400210382	MULTI-WELL PLAN
400210383	CONST. LAYOUT DRAWINGS
400210384	NRCS MAP UNIT DESC
400210385	ACCESS ROAD MAP

Total Attach: 10 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	CPW concerns addressed by BLM stips. Surface location just outside Project Rulison Tier II. Five BHL's for wells on this pad w/in Tier II were emailed by COGCC & oper. to DOE for review. DOE letters attached to those APD's. LGD/pub. comments waived. Final Comprehensive Review Status--passed.	11/17/2011 8:06:01 AM
DOW	This well pad location is included in the BLM approved South Parachute GAP (EA#COC 140-2006-050).  CPW affirms that the lease stipulations and conditions of approval assigned to this permit by the BLM suffice to address wildlife habitat and mitigation concerns.  Wednesday, November 16, 2011 at 9:10 a.m.	11/16/2011 9:06:21 AM
OGLA	Initiated/Completed OGLA Form 2A review on 10-27-11 by Dave Kubeczko; placed the Project Rulison COAs on the Form 2A; changed distance to SW to 260'; passed by CDPW on 11-16-11 with BLM stipulations and COAs acceptable; passed OGLA Form 2A review on 11-16-11 by Dave Kubeczko; Project Rulison COAs.	10/27/2011 5:08:05 PM
Permit	Operator corrected surface and minerals info. The form has passed completeness	10/11/2011 12:18:25 PM
Permit	Returned to draft. Fee surface and fed Minerals and the surface and mineral owner are labeled the same. Also it appears that there are two adjacent locations on the map.	10/7/2011 7:46:55 AM

Total: 5 comment(s)

### BMP

<u>Type</u>	<u>Comment</u>
Wildlife	All wildlife stipulations and best mangement pratices that apply, are applicable and that have been agreed to with the BLM and are presented in our approved South Parachute Geographic Area Plan for Oil & Gas Development (EA#COC140-2006-050) will be followed.

Total: 1 comment(s)