

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:

400151449

**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:

**423762**

Expiration Date:

**06/23/2014**

☒ 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: 10195

Name: WINTER RIDGE ENERGY LLC

Address: 555 17TH STREET - SUITE 950

City: DENVER State: CO Zip: 80202

**3. Contact Information**

Name: CLAYTON DOKE

Phone: (970) 669-7411

Fax: (970) 669-4077

email: cdoke@petersonenergy.com

**4. Location Identification:**

Name: ILES DOME UNIT Number: 38

County: MOFFAT

QuarterQuarter: NW SE Section: 22 Township: 4N Range: 92W Meridian: 6 Ground Elevation: 6446

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: 1336 feet FSL, from North or South section line, and 2031 feet FEL, from East or West section line.

Latitude: 40.300880 Longitude: -107.697880 PDOP Reading: 1.5 Date of Measurement: 11/18/2010

Instrument Operator's Name: B. Powers

**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"/>	Wells: <input type="text" value="1"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="1"/>	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="1"/>	Oil Tanks: <input type="text" value="2"/>	Fuel Tanks: <input type="text"/>	

Other: Cuttings Pit for closed loop system.

6. Construction:

Date planned to commence construction: 07/01/2011 Size of disturbed area during construction in acres: 1.70  
Estimated date that interim reclamation will begin: 10/01/2011 Size of location after interim reclamation in acres: 0.80  
Estimated post-construction ground elevation: 6445 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: 03/14/2011  
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: \_\_\_\_\_ ☐ 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: 5280, public road: 301, above ground utilit: 5280  
, railroad: 5280, property line: 1336

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: 149: Pinelli Loam 3-12%

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: 1075, water well: 2575, depth to ground water: 110

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:

Depth to groundwater determined from water well permit #: 109439- -, located NWNW Sec. 26 T4N-R92W, 100 FNL & 100 FWL, approximately 2,575' from the proposed location. This is the closest completed water well to the location. There is an expired water well permit ~1926' to the north-north west. Location is on Federal minerals thus no plugging bond information has been included. Winter Ridge Energy, LLC has executed an SUA with the surface owner. Reference area is immediately adjacent to the well location (south), thus location pictures are reference area pictures.

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

Signed: \_\_\_\_\_ Date: 04/28/2011 Email: andy.peterson@petersonenergy.com

Print Name: ANDY PETERSON Title: V.P. OPERATIONS

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: 6/24/2011

**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.**

**GENERAL SITE COAs:**

Reserve pit, or any pit used to hold fluids, if constructed, must be lined or a closed loop system (which operator has been indicated on the Form 2A) must be implemented during drilling.

Operator must ensure 110 percent 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 sufficiently protective of nearby surface water. If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of drilling, completion, or produced fluids.

Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks 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.

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.

**Attachment Check List**

Att Doc Num	Name
2033868	CORRESPONDENCE
2033869	PROPOSED BMPs
400151449	FORM 2A SUBMITTED
400160311	SURFACE AGRMT/SURETY
400160312	NRCS MAP UNIT DESC
400160313	ACCESS ROAD MAP
400160314	HYDROLOGY MAP
400160316	CONST. LAYOUT DRAWINGS
400160318	CONST. LAYOUT DRAWINGS
400160319	REFERENCE AREA MAP
400160321	CONST. LAYOUT DRAWINGS
400164923	LOCATION DRAWING
400165296	LOCATION PICTURES

Total Attach: 13 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
DOW	CDOW and Winter Ridge Energy LLC consulted on this well pad location and the BMPs that Winter Ridge Energy LLC agreed to on June 20, 2011, via email correspondence, are appropriate for the site and species impacted by this well pad and associated activities.  Michael Warren on Thursday, June 23, 2011 at 8:30 A.M.	6/23/2011 8:30:44 AM
OGLA	Initiated/Completed OGLA Form 2A review on 05-30-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks, tank berming, lined pit/closed loop, and cuttings low moisture content COAs from operator on 05-30-11; received clarifications and acknowledgement of COAs from operator on 05-31-11; passed by CDOW on 06-23-11 with operator agreed to BMPs (submitted 06-20-11) acceptable; passed OGLA Form 2A review on 06-24-11 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, tank berming, lined pit/closed loop, and cuttings low moisture content COAs.	5/30/2011 12:48:48 PM
Permit	Back to draft for designated agent and both location & reference photos have N/S/S/W with not East photo. sf	5/16/2011 10:21:36 AM
Permit	Back to draft for plugging bond removal, photos's to be dated, location drawing to show 400'. sf	5/2/2011 9:34:48 AM

Total: 4 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<p>Columbian Sharp-Tailed Grouse</p> <ul style="list-style-type: none"><li>• Where oil and gas activities must occur within 1.25 miles of Columbian sharp-tailed grouse leks or within other mapped Columbian sharp-tailed grouse breeding or summer habitat, conduct these activities outside the period between March 15 and July 30.</li><li>• Restrict well site visitations to portions of the day between 9:00 a.m. and 4:00 p.m. during the lekking season (March 1 to June 1).</li><li>• Use noise reduction equipment on compressors and other development and production equipment.</li><li>• Muffle or otherwise control exhaust noise from pump jacks and compressors so that operational noise will not exceed 49 dB measured at 30 feet from the source.</li><li>• Treat waste water pits and any associated pit containing water that provides a medium for breeding mosquitoes with Bti (<i>Bacillus thuringiensis</i> v. <i>israelensis</i>) or take other effective action to control mosquito larvae that may spread West Nile Virus to wildlife, especially grouse.</li><li>• Reclaim/restore Columbian sharp-tailed grouse habitats with native grasses and forbs conducive to optimal Columbian sharp-tailed grouse habitat and other wildlife appropriate to the ecological site.</li><li>• Avoid aggressive non-native grasses in Columbian Sharp-tailed Grouse habitat reclamation.</li><li>• A small percentage of the appropriate species of big sagebrush should be re-seeded on disturbed sites.</li><li>• Reclamation of breeding habitat should include a substantially higher percentage of forbs than other areas.</li></ul>
Wildlife	<p>Deer and Elk</p> <ul style="list-style-type: none"><li>• Where oil and gas activities must occur in mule deer critical winter range or elk winter concentration areas, conduct these activities outside the time period from December 1 through April 15.</li><li>• Restrict post-development well site visitations to between the hours of 10:00 a.m. and 3:00 p.m. and reduce well site visitations between December 1 and April 15 in mule deer and elk winter range.</li><li>• Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife.</li><li>• Close and immediately reclaim all roads that are redundant, not used regularly, or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation.</li><li>• Avoid aggressive non-native grasses and shrubs in mule deer and elk habitat restoration.</li><li>• Reclaim mule deer and elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.</li><li>• Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.</li></ul>

Total: 2 comment(s)