

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



Document Number:

400405072

Date Received:

05/01/2013

Oil and Gas Location Assessment

☐ New Location ☒ Amend Existing Location Location#: 312001

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:

**312001**

Expiration Date:

**05/23/2016**

☒ 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: 26625

Name: ELM RIDGE EXPLORATION CO LLC

Address: 12225 GREENVILLE AVE STE 950

City: DALLAS State: TX Zip: 75243-9362

3. Contact Information

Name: Terry Lindeman

Phone: (505) 632-3476

Fax: (505) 632-8151

email: TLindeman@elmridge.net

4. Location Identification:

Name: Harmon-N33N8 Number: 17 SWSW

County: LA PLATA

QuarterQuarter: SWSW Section: 17 Township: 33N Range: 8W Meridian: N Ground Elevation: 6731

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: 1025 feet FNL, from North or South section line, and 1073 feet FWL, from East or West section line.

Latitude: 37.099950 Longitude: -107.746510 PDOP Reading: 3.0 Date of Measurement: 04/03/2008

Instrument Operator's Name: Nelson Ross

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="3"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="text" value="2"/>	Separators: <input type="text" value="2"/>	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="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="text" value="2"/>	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: \_\_\_\_\_

6. Construction:

Date planned to commence construction: 07/15/2013 Size of disturbed area during construction in acres: 0.92  
Estimated date that interim reclamation will begin: 10/15/2013 Size of location after interim reclamation in acres: 1.67  
Estimated post-construction ground elevation: 6731 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: dry and bury

## 7. Surface Owner:

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Date of Rule 306 surface owner consultation: 04/11/2013  
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: 20100131 ☐ 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: 365, public road: 1025, above ground utility: \_\_\_\_\_,  
railroad: 5260, property line: 113

## 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: Arboles Clay 3 to 12 percent slope.

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: Western wheatgrass, Big sagebrush, Blue grama, Bottlebrush squirreltail, India ricegrass,  
Muttongrass, Prairie Junegrass, Rocky Mountain Juniper, Rubber rabbitbrush, Twoneedle pinon

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: 575, water well: 675, depth to ground water: 300

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:

Colorado Division of Water Resources Aquamap shows depths of water wells in the general area to be between 170 -300 feet in depth.

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

Signed: \_\_\_\_\_ Date: 05/01/2013 Email: jlr@animas.net

Print Name: Robert D. Joyce Title: Agent

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: Matthew Lee Director of COGCC Date: 5/24/2013

**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.**

**SITE SPECIFIC COAs:**

Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

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

Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations (as shown on the Proposed BMPs attachment); 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.

The moisture content of any drill cuttings in a cuttings area, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1.

If the well is to be hydraulically stimulated, all flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permitted has been submitted/approved) 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 (preferably corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

**Attachment Check List**

Att Doc Num	Name
2106612	CORRESPONDENCE
400405072	FORM 2A SUBMITTED
400412114	CONST. LAYOUT DRAWINGS
400412116	LOCATION PICTURES
400412118	WELL LOCATION PLAT
400412123	ACCESS ROAD MAP
400412128	NRCS MAP UNIT DESC
400412382	HYDROLOGY MAP
400412384	LOCATION DRAWING
400412387	REFERENCE AREA MAP
400412389	SURFACE AGRMT/SURETY
400413261	MULTI-WELL PLAN
400413323	WAIVERS
400413324	WAIVERS

Total Attach: 14 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Agency	Initiated/Completed OGLA Form 2A review on 05-24-13 by Dave Kubeczko; placed fluid containment, spill/release BMPs, flowback to tanks, tank berming, cuttings low moisture content/910, and notification COAs on Form 2A; passed by CPW on 05-17-13 with no BMPs; passed OGLA Form 2A review 05-24-13; placed fluid containment, spill/release BMPs, flowback to tanks, tank berming, cuttings low moisture content/910, and notification COAs.	5/24/2013 3:20:33 PM
DOW	CPW attended a onsite with the Operator, surface owner and La Plata County. The location is co located with an existing facility resulting in no surface disturbance. The operator has proposed utilizing a pitiless drilling system, and plans to drill and complete this location outside of the winter.	5/17/2013 2:26:13 PM
Permit	Missing reference area photo.	5/3/2013 12:05:08 PM
Permit	Returned to draft. Incorrect plugging bond number. 20030086 has been released. Should be 20100131. Multi-well Plan shows one well.	5/2/2013 10:18:41 AM

Total: 4 comment(s)

### BMP

<u>Type</u>	<u>Comment</u>
Construction	<p>Narrative The IGE 140 well will be located within the footprint of the existing 110 well pad. No additional disturbance will be necessary.</p> <p>Drainage management:</p> <p>The following drainage management features will be used onsite: Straw wattles will be used during construction operations where appropriate control runoff and to prevent sediment from flowing beyond the perimeter of the previously disturbed area. Revegetation will occur in either the spring or summer.</p> <p>Visual Mitigation &amp; Revegetation:</p> <p>This well will be located on an existing well pad. No pit is planned as a closed loop system will be employed.</p> <p>No disturbance of vegetation outside the existing well pad will occur so no revegetation/reseeding will be necessary.</p> <p>All equipment will be painted with a uniform, non-reflective paint that is darker than the adjacent landscape.</p> <p>Elm Ridge will control all noxious weeds as identified by the La Plata County weed technician and will monitor the site after reclamation and spray for weeds as necessary.</p> <p>Noxious weeds will be controlled onsite by herbicide application, and methods of control will be pursuant to recommendations from the La Plata county weed control technician. Spraying will be applied by a certified professional. A weed management plan has been filed with the County Extension Office. Please refer to this plan for more details.</p>

Total: 1 comment(s)