

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:
400398367

Date Received:
04/04/2013

Oil and Gas Location Assessment

New Location Amend Existing Location Location#: 311899

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:
311899
Expiration Date:
05/08/2016

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.com

4. Location Identification:

Name: IGE Number: 117
 County: LA PLATA
 Quarter: SE Section: 18 Township: 33N Range: 7W Meridian: N Ground Elevation: 6532

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: 1512 feet FNL, from North or South section line, and 1621 feet FWL, from East or West section line.
 Latitude: 37.107270 Longitude: -107.653750 PDOP Reading: 3.0 Date of Measurement: 01/22/2007
 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="checkbox" value="4"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox" value="3"/>	Separators: <input type="checkbox" value="3"/>	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" value="1"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox" value="3"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox" value="2"/>	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: 05/15/2013 Size of disturbed area during construction in acres: 1.27
Estimated date that interim reclamation will begin: 10/15/2013 Size of location after interim reclamation in acres: 1.27
Estimated post-construction ground elevation: 6532 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: Closed loop, Dry, Bury on site

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 03/27/2013
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: 20100130 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: 850, public road: 3700, above ground utility: 1470,
railroad: 5280, property line: 154

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: 14. Bodot Clay, 3 to 10% 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: Western wheatgrass, Big sagebrush, Glue grama, Bottlebrush squirreltail, India ricegrass, Muttongrass, Prarie 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: 75, water well: 880, depth to ground water: 40

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 of ground water info was obtained from proximate water wells reports. Reference is located immediately adjacent to the well pad to the north on undisturbed ground.

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

Signed: _____ Date: 04/04/2013 Email: jl@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: 5/9/2013

**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.

Attachment Check List

Att Doc Num	Name
400398367	FORM 2A SUBMITTED
400398378	HYDROLOGY MAP
400398380	LOCATION DRAWING
400398381	LOCATION PICTURES
400398384	SURFACE PLAN
400398391	ACCESS ROAD MAP
400398394	MULTI-WELL PLAN
400398397	NRCS MAP UNIT DESC
400398403	REFERENCE AREA MAP

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received.	5/8/2013 12:03:00 PM
OGLA	Initiated/Completed OGLA Form 2A review on 04-23-13 by Dave Kubeczko; previously submitted and approved (07-26-12) Form 2A#400272316; OGCC Facility ID#311899; same COAs apply - fluid containment, spill/release BMPs, flowback to tanks, cuttings low moisture, and notification COAs; passed by CPW with provided seed mix acceptable; passed by OGLA Form 2A review on 05-08-13 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, cuttings low moisture, and notification COAs.	4/23/2013 10:31:33 AM

<p>OGLA</p>	<p>PREVIOUS FORM 2A#400272316 SITE SPECIFIC COAs:</p> <p>Notify the COGCC 48 hours prior to start of any new 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).</p> <p>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.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface or buried pipelines.</p> <p>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.</p> <p>If the wells are to be hydraulically stimulated, then 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 Permit 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.</p> <p>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.</p>	<p>4/23/2013 10:31:32 AM</p>
<p>DOW</p>	<p>CPW attended an onsite with La Plata County and the Operator on April 10th, 2013. The operate asked for recommendations for a seed mix to be used during interim and final reclamation from CPW. CPW provided the operator with the seed mix specifically developed for the San Juan Basin within the Pinyon-Juniper-Sagebrush ecosystem. Attached is the seed mix that the operator agreed to use during the onsite.</p> <p>Ecotype: Pinyon/Juniper Woodlands-Sagebrush</p> <p>Species</p> <p>GRASSES Variety* % of mix FRPLS* PLS rate/acre</p> <p>Western wheatgrass Arriba 10% 8 0.8</p> <p>Bluebunch wheatgrass Secar/Goldar 15% 10 1.5</p> <p>Sandberg bluegrass UP release 15% 2 0.3</p> <p>Muttongrass (UP Colona) 10% 1 0.1</p> <p>Junegrass Uncompahgre 15% 1 0.15</p> <p>Indian ricegrass White River 10% 6 0.6</p> <p>Sand dropseed 10% 1 0.1</p>	<p>4/19/2013 9:34:49 AM</p>

	<p>Blue grama Hatchita 5% 1.5 0.075</p> <p>Galleta Viva 10% 6 0.6</p> <p>100%</p> <p>*recommended variety unless locally collected seed is available, in which case locally collected seed is preferred</p> <p>*based on drill seeding; 2x if broadcasting</p> <p>FORBS Variety*</p> <p>Utah sweetvetch (UP Uncompahgre) TIMP 15% 15 2.25</p> <p>Lewis flax Maple grove 15% 4 0.6</p> <p>Penstemon cyanocaulis* (bluestem) (UP San Miguel) 15% 1 0.15</p> <p>Penstemon comarrhenus (dusty) (UP Delta) 15% 1 0.15</p> <p>Penstemon palmeri (palmer) 15% 2 0.3</p> <p>Penstemon eatonii (firecracker) 15% 1 0.15</p> <p>Silky lupine -sericeus* 15% 20 3</p> <p>Gooseberryleaf globemallow 15% 2 0.3</p> <p>Oregon daisy (UP Dry Fork) 15% 1 0.15</p> <p>*Select 5 of 8 species based on availability</p> <p>SHRUBS* Variety</p> <p>Artemesia** (+) 1</p> <p>Fourwing saltbush 1</p> <p>Winterfat Hatch 1</p> <p>Fringed sage 0.5</p> <p>cliffrose 1</p> <p>**wyomingensis or nova depending on site</p> <p>(+) to be included in all PJ/SS mixes</p> <p>*Select 3 of the 5 species based on availability</p> <p>NOTE: (UP)- The UP varieties are in development and may not be available in sufficient quantities.</p> <p>In which case, the most appropriate available variety should be utilized. S</p> <p>upply and availability should increase in future years at which time the UP varieties should be used.</p>	
Permit	<p>Returned to draft. Incorrect plugging bond number (20100130). Surface bond not required with SUA. NRCS Map Unit Description number is missing.</p>	4/5/2013 1:13:26 PM

Total: 5 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Construction	<p>The IGE 116 well location will be expanding to the North of the existing Ute T. G. U. #1 well into a relatively flat, non-irrigated field. Very little vegetation will be removed. Dirt from the excavation of the reserve pit will be stockpiled until interim reclamation. Straw wattles will be placed around the perimeter of the well pad during construction operations where appropriate to control runoff and prevent sediment from flowing beyond the perimeter of the disturbed area.</p> <p>All equipment will be painted with a uniform, non-reflective paint that is darker than the adjacent landscape.</p> <p>Any disturbed area that is outside the permanent well pad will reseeded with a weed-free seed mixture consistent with the surrounding area.</p> <p>Re-seeding will be done via drill seeding in flat areas and broadcast seeding on slopes. Reseeding will be done in spring or summer.</p> <p>Elm Ridge will control all noxious weeds as identified by the La Plata County weed technician.</p> <p>Elm Ridge will monitor the site after reclamation and spray for weeds where necessary. Methods of control will be pursuant to recommendations from the LaPlata County weed control technician</p>

Total: 1 comment(s)