

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:

400423697

Date Received:

05/24/2013

Oil and Gas Location Assessment

New Location

Amend Existing Location

Location#: 333710

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:

**333710**

Expiration Date:

**03/03/2018**

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: 53255

Name: MARALEX RESOURCES, INC

Address: P O BOX 338

City: IGNACIO State: CO Zip: 81137

3. Contact Information

Name: Naomi Azulai

Phone: (970) 563-4000

Fax: (970) 563-4116

email: naomi@maralexinc.com

4. Location Identification:

Name: Jennie Rose 33-7-3

Number: #3B

County: LA PLATA

Quarter: NENW Section: 3 Township: 33N Range: 7W Meridian: N Ground Elevation: 6720

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: 1204 feet FNL, from North or South section line, and 1531 feet FWL, from East or West section line.

Latitude: 37.136850 Longitude: -107.599820 PDOP Reading: 3.0 Date of Measurement: 03/05/2008

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"/> <u>1</u>	Wells: <input type="checkbox"/> <u>2</u>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox"/>	Separators: <input type="checkbox"/>	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"/> <u>3</u>	Pump Jacks: <input type="checkbox"/> <u>2</u>	Pigging Station: <input type="checkbox"/> <u>1</u>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/> <u>1</u>	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: 12/23/2013 Size of disturbed area during construction in acres: 0.98  
Estimated date that interim reclamation will begin: 03/03/2016 Size of location after interim reclamation in acres: 0.50  
Estimated post-construction ground elevation: 6726 Will a closed loop system be used for drilling fluids: Yes  No   
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: Evaporation/Burial

### 7. Surface Owner:

Name: R. Bruce & Patricia Clark Phone: \_\_\_\_\_  
Address: P.O. Box 125 Fax: \_\_\_\_\_  
Address: \_\_\_\_\_ Email: \_\_\_\_\_  
City: Ignacio State: CO Zip: 81137 Date of Rule 306 surface owner consultation: \_\_\_\_\_  
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: 20010075  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: 845, public road: 1180, above ground utility: 845,  
railroad: 50700, property line: 172

### 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: 76. Witt loam, 3 to 8 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: 245 , water well: 607 , depth to ground water: 23  
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:**

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

Signed: \_\_\_\_\_ Date: 05/24/2013 Email: naomi@maralexinc.com  
Print Name: Naomi Azulai Title: Production Technician

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: 3/4/2015

**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.**

## **Description**

### **GENERAL SITE COAs:**

Notify the COGCC 48 hours prior to start of pad construction, pit liner installation, rig mobilization, spud, pipeline testing, 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 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 (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 temporary surface pipelines or permanent buried pipelines. Additional containment shall be required where temporary or permanent pumps and other necessary equipment or chemicals are located.

Location is in a sensitive area due to shallow groundwater; therefore, either a closed loop system must be used, or the drilling pit must be lined (24-mil HDPE) and constructed above the top of groundwater.

For pits containing fluids other than freshwater only; the pit must be fenced. A minimum six-foot high fence is required for active (drilling/flowback operations are ongoing) drilling/completion pits and inactive cuttings pits containing free liquids (no fencing or netting is required for inactive cuttings pits where free liquids are removed).

If completion operations are delayed for more than 10 days from the end of 24 hour drilling operation then any pit containing fluids shall be fenced with a minimum six foot high fence and netting shall be installed to prevent access by birds.

Within 30 days after completion operations end, the operator will do one of the following to comply with Rule 902.d.: (1) initiate removal of liquids from all pits for final closure and remediation (2) submit a Sundry Notice, Form 4, with appropriate water quality documentation demonstrating that any liquids remaining in the pit will not harm wildlife; or (3) install a minimum six-foot fence with netting, to prevent access by birds, and a one-foot exclusionary fence (e.g. minimum one-foot height silt fencing or fine mesh) along the base of the fence anchored to the ground (not buried). In the event that circumstances preclude the operator from selecting one of these options within 30 days after completion operations end, then the operator may seek a variance to extend this 30-day period.

The moisture content of any freshwater generated drill cuttings in a cuttings trench, area, 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 freshwater generated drill cuttings are to be onsite, they must also meet the applicable standards of table 910-1.

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.

### **PIPELINE COAs:**

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service.

Operator must implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located.

Operator must routinely inspect the entire length of the surface pipeline to ensure integrity.

Operator must ensure 110 percent secondary containment for any potential volume of fluids that may be released from the surface pipeline at all stream, intermittent stream, ditch, and drainage crossings.

Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2106803	CORRESPONDENCE
2518428	LOCATION DRAWING
2518429	HYDROLOGY MAP
400423697	FORM 2A SUBMITTED
400423773	CONST. LAYOUT DRAWINGS
400423775	REFERENCE AREA MAP
400423777	ACCESS ROAD MAP
400423778	NRCS MAP UNIT DESC
400423779	WAIVERS
400424881	LOCATION PICTURES
400425197	MULTI-WELL PLAN

Total Attach: 11 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Off Hold. Ready for final approval.	3/4/2015 12:44:50 PM
OGLA	Phone discussion of planned Facility count with Operator on 3/2/2014. Per Operator, change Pump Jack count from 3 to 2. Per Operator, change Interim Reclamation Date from 10/01/2014 to 3/3/2016. Form review complete - ready to pass	3/3/2015 3:29:35 PM
Permit	Form remains ON HOLD pending enforcement actions against operator. Final review completed; no public comment received. LGD comment posted.	10/31/2013 11:44:43 AM
DOW	CPW is concerned with access to drilling pit fluids by wildlife including birds and bats. We recommend that the pits be fences and netted in a manner that excludes wildlife.	6/28/2013 12:15:16 PM
OGLA	Initiated/Completed OGLA Form 2A review on 06-27-13 by Dave Kubeczko; placed fluid containment, spill/release BMPs, moisture content cuttings, lined pit/closed loop, pit fencing/netting, notification, pipeline, tank berming, and flowback to tanks COAs on Form 2A; sent email to operator on 06-27-13; changed depth to GW to 23' bgs; changed to sensitive area due to close SW (245') and shallow GW (23' bgs); conducted CPW consultation onsite on 06-10-13; passed by CPW on 06-28-13 with fencing and netting COA by COGCC acceptable; passed OGLA Form 2A review on 10-30-13 by Dave Kubeczko; fluid containment, spill/release BMPs, moisture content cuttings, lined pit/closed loop, pit fencing/netting, notification, pipeline, tank berming, and flowback to tanks COAs.	6/27/2013 11:42:29 AM
OGLA	ON HOLD - Application and related Forms placed ON HOLD after conference with COGCC staff and Director concerning operator compliance. Forms to remain ON HOLD until active enforcement matters against operator are resolved by Commission action	6/13/2013 10:52:45 AM
Permit	Operator provided revised hydrology map and location drawing and revised number of wells to 2.	6/3/2013 11:02:43 AM
LGD	Maralex Resources will need to obtain a land use permit for the proposed well from La Plata County. Please contact the La Plata County Planning Department.	6/3/2013 10:05:12 AM
Permit	Facilities says 3 wells but only 2 are present on the diagram.	3/3/2013 9:05:19 AM
Permit	Requested a revised hydrology map and location drawing.	3/3/2013 8:46:23 AM
Permit	This form has passed completeness.	5/29/2013 9:25:29 AM
Permit	Returned to DRAFT. Appears to be in an SWH but is not marked as such. Also, the Location Photos are required to be color photos. No multi-well plan attached. Requested review from operator.	5/28/2013 6:46:48 AM

Total: 12 comment(s)

### Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>