

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:  
400200094

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:  
**426363**  
Expiration Date:  
**11/05/2014**

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: 27742  
Name: EOG RESOURCES INC  
Address: 600 17TH ST STE 1100N  
City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Jennifer Yu  
Phone: (303) 824-5576  
Fax: (303) 824-5577  
email: jennifer\_yu@eogresources.com

4. Location Identification:

Name: Indian Creek Number: 01-05H  
County: JACKSON  
Quarter: SWSE Section: 5 Township: 6N Range: 78W Meridian: 6 Ground Elevation: 8614

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: 220 feet FSL, from North or South section line, and 2020 feet FEL, from East or West section line.  
Latitude: 40.512519 Longitude: -106.166042 PDOP Reading: 2.4 Date of Measurement: 12/01/2010  
Instrument Operator's Name: Robert Kay

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="1"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox" value="2"/>	Separators: <input type="checkbox" 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" value="2"/>	LACT Unit: <input type="checkbox" value="1"/>	Pump Jacks: <input type="checkbox" value="1"/>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox" value="1"/>	Gas Pipeline: <input type="checkbox" value="1"/>	Oil Pipeline: <input type="checkbox" value="1"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox" value="1"/>
Gas Compressors: <input type="checkbox"/>	VOC Combustor: <input type="checkbox" value="1"/>	Oil Tanks: <input type="checkbox" value="5"/>	Fuel Tanks: <input type="checkbox"/>	

Other: 1 Emergency Tank, 1 Meter Run, Ambitrol, 2 Lined Heaters for Trace System, 1 Well Head, 1 Cuttings Pit

6. Construction:

Date planned to commence construction: 06/01/2012 Size of disturbed area during construction in acres: 4.99  
Estimated date that interim reclamation will begin: 12/01/2012 Size of location after interim reclamation in acres: 1.57  
Estimated post-construction ground elevation: 8614 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: 10/27/2010  
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: 20030058  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: 7292, public road: 2230, above ground utilit: 6372  
, railroad: 154123, property line: 220

### 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: GeD - Gelkie sand loam, 2 to 15% 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: Big Sagebrush, Idaho fescue, big bluegrass, Sedge

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: 2555, water well: 2052, depth to ground water: 21

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:

Flare Stack to be removed after gas line installation. One of the two heater treaters will be removed when production volumes fall below the capacity of a single heater treater. Static water well information obtained from Water Well Permit #210176 approximately 2052 feet northeast from the proposed location.

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

Signed: \_\_\_\_\_ Date: 08/26/2011 Email: jennifer\_yu@eogresources.com

Print Name: Jennifer Yu Title: Regulatory Administrator

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. Nashin Director of COGCC Date: 11/6/2011

**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.**

**SITE SPECIFIC COAs:**

Location is in a sensitive area due to potentially shallow groundwater (location is on alluvium and gravels); therefore, either a closed loop system must be used (which operator has indicated on the Form 2A), or the drilling pit must be lined and constructed above the top of groundwater.

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, 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 buried permanent pipelines.

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.

If fracing operations occur, 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.

**Attachment Check List**

Att Doc Num	Name
2033987	CORRESPONDENCE
2034055	PROPOSED BMPs
400200094	FORM 2A SUBMITTED
400200108	LOCATION PICTURES
400200109	LOCATION DRAWING
400200111	ACCESS ROAD MAP
400200113	REFERENCE AREA MAP
400200114	REFERENCE AREA PICTURES
400200116	NRCS MAP UNIT DESC
400200117	HYDROLOGY MAP
400200118	CONST. LAYOUT DRAWINGS

Total Attach: 11 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final Review Completed. No LGD or public comment received.	11/4/2011 9:31:06 AM
Permit	Onsite 10/5/2011. additional wildlife BMP's.	11/4/2011 9:31:05 AM
Permit	ON HOLD: w/o additional BMP's. OK to pass.	10/11/2011 10:45:56 AM
DOW	CPW and EOG attended a site visit for this location on 10-4-11 after numerous attempts by EOG and CPW to find a good date that would work for both parties.  BMPs were discussed and most of them were agreed upon. Several BMPs require EOG to get additional review and approval from management.  A complete set of BMPs is forthcoming.  Friday, October 7, 2011 at 3:23 p.m.	10/7/2011 3:20:59 PM
Permit	Received and attached federal permit.	9/7/2011 3:57:15 PM
Permit	Requesting copy of federal permit.	9/6/2011 10:37:46 AM
OGLA	Initiated/Completed OGLA Form 2A review on 08-29-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks, cuttings low moisture, and lined pit/closed loop COAs from operator on 08-29-11; received acknowledgement of COAs from operator on 09-01-11; passed by CDOW on 10-07-11 with CDPW and operator agreed to BMPs on 11-01-11 (included as attachment and listed on the BMP tab) acceptable; passed OGLA Form 2A review on 11-01-11 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, cuttings low moisture, and lined pit/closed loop COAs.	8/29/2011 9:16:27 AM
Permit	Returned to draft at operators request.	8/29/2011 6:13:31 AM
Permit	Returned to draft. Surface location should be from east.	8/26/2011 9:42:06 AM

Total: 9 comment(s)

**BMP**

<b>Type</b>	<b>Comment</b>
Storm Water/Erosion Control	A stormwater and erosion control plan will be implemented to prevent sedimentation and erosion.
Wildlife	EOG will use a closed loop system during drilling operations for all three locations. The closed loop system will include 1- cuttings pit, and 4-6 400-bbl tanks. If the well is a producing location, EOG will install mufflers on production equipment reducing noise levels in accordance with COGCC Rules and Regulations. In accordance with EOGs Safety Rules and Regulations all company employees must complete a Smith Driving System Training class. EOG company policies prohibit the use or carrying of firearms in company offices and in company vehicles. Interim reclamation will be completed after completion activities or as early as possible to take advantage of available ground moisture. EOG will use a seed mix approved by the authorized officer for all reclamation activities. EOG agrees to conduct drilling and completion activities in accordance with COAs as established by Bureau of Land Management on Indian Creek 1-05H and Peterson Ridge 1-20H.

Total: 2 comment(s)