

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



DE	ET	OE	ES
----	----	----	----

Document Number:  
400177065

## 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:  
**424854**  
Expiration Date:  
**08/19/2014**

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: 10255  
Name: QUICKSILVER RESOURCES INC  
Address: 801 CHERRY ST - #3700 UNIT 19  
City: FT WORTH State: TX Zip: 76102

### 3. Contact Information

Name: Lisa Smith  
Phone: (303) 8579999  
Fax: (303) 4509200  
email: lspermitco@aol.com

### 4. Location Identification:

Name: James Stehle Number: 14-15  
County: MOFFAT  
Quarter: LOT 13 Section: 15 Township: 7N Range: 91W Meridian: 6 Ground Elevation: 6642  
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: 493 feet FSL, from North or South section line, and 535 feet FWL, from East or West section line.  
Latitude: 40.558672 Longitude: -107.598897 PDOP Reading: 1.6 Date of Measurement: 04/25/2011  
Instrument Operator's Name: McCoy Anderson

### 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"/> <u>1</u>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox"/> <u>1</u>	Separators: <input type="checkbox"/> <u>2</u>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/> <u>1</u>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="checkbox"/> <u>1</u>	Pigging Station: <input type="checkbox"/>
Electric Generators: <input type="checkbox"/>	Gas Pipeline: <input type="checkbox"/>	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"/> <u>2</u>	Fuel Tanks: <input type="checkbox"/>	

Other: 1 Heater Treater

### 6. Construction:

Date planned to commence construction: 08/05/2011 Size of disturbed area during construction in acres: 2.28  
Estimated date that interim reclamation will begin: 11/15/2011 Size of location after interim reclamation in acres: 1.00  
Estimated post-construction ground elevation: 6642 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: 04/14/2011  
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: 20080107  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: 2867, public road: 4118, above ground utilit: 775  
, railroad: 5280, property line: 844

### 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: 12: Berlake Sandy 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: N/A - In a Hay Meadow.

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): Hay Meadow

### 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: 214, water well: 2569, depth to ground water: 121

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: 06/21/2011 Email: lspermitco@aol.com

Print Name: Lisa Smith Title: President

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: 8/20/2011

**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:**

The drilling pit, if constructed, must be lined, or a closed loop system (which operator has indicated on the Form 2A) must be implemented during drilling. All cuttings generated during drilling with OBM must be kept in the mud tanks, or placed either in containers or on a lined/bermed portion of the well pad; prior to offsite disposal.

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

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.

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.

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
2033887	CORRESPONDENCE
2033935	CORRESPONDENCE
400177065	FORM 2A SUBMITTED
400177439	ACCESS ROAD MAP
400177440	CONST. LAYOUT DRAWINGS
400177443	HYDROLOGY MAP
400177444	LOCATION PICTURES
400177449	REFERENCE AREA MAP
400177451	REFERENCE AREA PICTURES
400177453	NRCS MAP UNIT DESC
400177482	SURFACE AGRMT/SURETY
400178191	LOCATION DRAWING

Total Attach: 12 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
DOW	<p>CPW and Quicksilver (by and through Permitco) agreed to BMPs recommended by CPW on June 29, 2011.</p> <p>The following are BmpAs to be attached to Form 2A.</p> <p>Where oil and gas activities must occur in elk winter concentration areas, conduct these activities outside the time period from December 1 through April 15.</p> <p>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 elk winter range.</p> <p>Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.</p> <p>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.</p> <p>Avoid aggressive non-native grasses and shrubs in elk habitat restoration.</p> <p>Reclaim elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.</p> <p>on Friday, August 5, 2011 at 9:30</p>	3/5/2011 9:24:30 AM
OGLA	<p>Initiated/Completed OGLA Form 2A review on 07-08-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, lined pits/closed loop, moisture content cuttings, flowback to tanks, and tank berming COAs from operator on 07-08-11; received acknowledgement of COAs from operator on 07-13-11; passed by CDOW on 08-05-11 with operator agreed to BMPs acceptable; passed OGLA Form 2A review on 08-05-11 by Dave Kubeczko; fluid containment, spill/release BMPs, lined pits/closed loop, moisture content cuttings, flowback to tanks, and tank berming COAs.</p>	7/8/2011 3:09:04 PM
Permit	<p>Changed measure date to match Well Location Plat, well count on Facilities and Construction tab, right to construct to mineral lease Added surface owner is mineral owner</p>	7/6/2011 8:38:39 PM
Permit	<p>Needs plugging bond, Qtr/Qtr should be Lot 15. Location doesn't plot to where attachments show up. Location drawing incorrect. sbf Drawings corrected, plugging bond added, qtr/qtr corrected 6/28/11. NKP</p>	6/22/2011 4:25:12 PM

Total: 4 comment(s)

**BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>
Wildlife	<ul style="list-style-type: none"> <li>• Where oil and gas activities must occur in 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 elk winter range.</li> <li>• Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.</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 elk habitat restoration.</li> <li>• Reclaim elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.</li> </ul>

Total: 1 comment(s)