

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:

400304735

Date Received:

08/01/2012

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:

**430124**

Expiration Date:

**09/05/2015**

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: Cindy Keister  
 Phone: (817) 665-5572  
 Fax: (817) 665-5009  
 email: ckeister@qvinc.com

4. Location Identification:

Name: Lay Creek Facility Number: \_\_\_\_\_  
 County: MOFFAT  
 Quarter: NESE Section: 12 Township: 7N Range: 93W Meridian: 6 Ground Elevation: 6458

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: 2546 feet FSL, from North or South section line, and 991 feet FEL, from East or West section line.  
 Latitude: 40.572236 Longitude: -107.775667 PDOP Reading: 1.3 Date of Measurement: 04/27/2012  
 Instrument Operator's Name: Glen McElroy/Uintah

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"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/> 1
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox"/> 2	Separators: <input type="checkbox"/>	Electric Motors: <input type="checkbox"/> 1	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/> 8	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="checkbox"/>	Oil Pipeline: <input type="checkbox"/>	Water Pipeline: <input type="checkbox"/>	Flare: <input type="checkbox"/> 1
Gas Compressors: <input type="checkbox"/> 8	VOC Combustor: <input type="checkbox"/>	Oil Tanks: <input type="checkbox"/> 2	Fuel Tanks: <input type="checkbox"/>	

Other: 1 NGL Storage Tank, 1 JT Skid MRU

6. Construction:

Date planned to commence construction: 10/01/2012 Size of disturbed area during construction in acres: 9.69  
 Estimated date that interim reclamation will begin: 10/01/2013 Size of location after interim reclamation in acres: 9.69  
 Estimated post-construction ground elevation: 6458 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: \_\_\_\_\_

**7. Surface Owner:**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Address: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Address: \_\_\_\_\_ Email: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ 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: 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: 5280, public road: 9096, above ground utilit: 220  
 , railroad: 55968, property line: 991

**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: 66 Evanot loam, 1 to 12 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: 07/17/2012  
List individual species: Big sagebrush (Artemisia tridentata) and rabbitbrush (Chrysothamnus spp)

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: 180, water well: 5478, depth to ground water: 180  
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:

This is an existing compressor site that will be expanded. The Walker 12-1 Well will be plugged and abandoned prior to expanding the current site. Surface owner consultation not required under SUA for expansion of pad. The site diagram shows the proposed equipment. Listed on Item 1 Facilities and Construction is the equipment needed to start up the facility.

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

Signed: \_\_\_\_\_ Date: 08/01/2012 Email: ckeister@qrinc.com  
Print Name: Cindy Keister Title: Dir Regulatory Affairs

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: 9/6/2012

**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 COGCC 48 hours prior to start of construction of the compressor pad via Form 42.

Operator must ensure secondary containment for any volume of fluids contained at the site during natural gas activities and 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.

All tanks and aboveground vessels containing fluids must have secondary containment structures. All secondary containment structures/areas must be lined. Operator must ensure 150 percent secondary containment for the largest structure containing fluids within each bermed area the facility during operations. The construction and lining of the secondary containment structures/areas shall be supervised by a professional engineer or their agent.

Berms or other containment devices shall be constructed to be sufficiently impervious (preferably corrugated steel with a liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

Operator must submit a Form 12, Gas Facility Registration/Change of Operator, and provide COGCC with the required documents and financial assurance documents for this facility prior to startup.

Operator shall implement reasonable noise reduction equipment on compressors and other production equipment or add sound barriers to limit noise levels at property boundaries. Operator shall comply with the applicable noise levels presented in Rule 802. Noise Abatement.

**Attachment Check List**

Att Doc Num	Name
2034519	CORRESPONDENCE
2034520	PROPOSED BMPs
400304735	FORM 2A SUBMITTED
400310097	SURFACE AGRMT/SURETY
400310115	NRCS MAP UNIT DESC
400311178	ACCESS ROAD MAP
400311179	HYDROLOGY MAP
400311184	LOCATION DRAWING
400311186	SENSITIVE AREA MAP
400311187	LOCATION PICTURES
400311189	REFERENCE AREA MAP
400311190	REFERENCE AREA PICTURES
400311192	CONST. LAYOUT DRAWINGS

Total Attach: 13 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	No LGD or public comments. Final Review--passed.	9/6/2012 8:18:20 AM
OGLA	Initiated/Completed OGLA Form 2A review on 08-20-12 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, Form 12 submittal, tank berming, lined bermed areas, and sound mitigation COAs from operator on 08-20-12; received acknowledgement of COAs from operator on 08-?-12; changed to sensitive area due to close SW (180'); waived by COGCC for CPW on 09-05-12 with operator agreed to BMPs acceptable; passed OGLA Form 2A review on 09-05-12 by Dave Kubeczko; fluid containment, spill/release BMPs, Form 12 submittal, tank berming, lined bermed areas, and sound mitigation COAs.	8/20/2012 3:12:04 PM
Permit	Distance to nearest bldg. greater than one mile. Changed qtr/qtr to NESE. Oper. confirmed well to be P&A is Walker 12-1, API 081-07044.	8/20/2012 7:29:25 AM

Total: 3 comment(s)

**BMP**

<b>Type</b>	<b>Comment</b>
Wildlife	<ol style="list-style-type: none"><li>1. Where oil and gas activities must occur in mule deer critical winter range, elk winter concentration areas, Quicksilver Resources Inc. agrees to limit construction on this facility during the time period from December 1 through April 15.</li><li>2. Quicksilver agrees to restrict visits to the site between the hours of 10:00 a.m. and 3:00 p.m. and between December 1 and April 15 whenever feasible. The site will not be manned fully but there will be times when operational conditions at the site require immediate attention.</li><li>3. Quicksilver agrees to be in compliance with Rule 802.c, "Noise Abatement", for a light industrial zone.</li><li>4. Use hospital grade mufflers for compressors, pump jacks, or other motors necessary to run operations at the site.</li><li>5. Quicksilver agrees to employ other noise reduction features whenever possible. This facility cannot rely on electric power for compression and will run on natural gas driven compression.</li><li>6. Use combustors, instead of traditional flare technology, to reduce avoidance of grouse and big game.</li><li>7. Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.</li><li>8. Include a weed management plan and implement the plan as part of reclamation.</li><li>9. Reclaim greater sage-grouse, mule deer, and elk habitats with native shrubs, grasses, and forbs appropriate to the ecological site disturbed.</li><li>10. Install and utilize bear-proof dumpsters and trash receptacles for all food-related trash on location, following COGCC Rule 1204 a-1.</li></ol>

Total: 1 comment(s)