


<b>FORM</b> <b>2A</b> Rev 04/01	<b>State of Colorado</b> <b>Oil and Gas Conservation Commission</b> 1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DE</td> <td style="width: 25%;">ET</td> <td style="width: 25%;">OE</td> <td style="width: 25%;">ES</td> </tr> </table> <p style="text-align: center;">Document Number: 400140862</p>	DE	ET	OE	ES																					
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<b>Oil and Gas Location Assessment</b>			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">         Location ID:  <b>313399</b> </div> <div style="border: 1px solid black; padding: 5px;">         Expiration Date:  <b>04/16/2014</b> </div>																									
<div style="display: flex; justify-content: space-between;"> <span><input type="checkbox"/> New Location</span> <span><input checked="" type="checkbox"/> Amend Existing Location</span> <span>Location#: <u>313399</u></span> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">         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 <a href="http://colorado.gov/cogcc/">http://colorado.gov/cogcc/</a> for all accompanying information pertinent to this Oil and Gas Location Assessment.       </div>																												
<input checked="" type="checkbox"/> This location assessment is included as part of a permit application.																												
<b>1. CONSULTATION</b> <input type="checkbox"/> This location is included in a Comprehensive Drilling Plan. CDP # _____ <input checked="" type="checkbox"/> This location is in a sensitive wildlife habitat area. <input type="checkbox"/> This location is in a wildlife restricted surface occupancy area. <input type="checkbox"/> This location includes a Rule 306.d.(1)A.ii. variance request.																												
<b>2. Operator</b> Operator Number: <u>10255</u> Name: <u>QUICKSILVER RESOURCES INC</u> Address: <u>777 WEST ROSEDALE</u> City: <u>FT WORTH</u> State: <u>TX</u> Zip: <u>76104</u>		<b>3. Contact Information</b> Name: <u>Venessa Langmacher</u> Phone: <u>(303) 8579999</u> Fax: <u>(303) 4509200</u> email: <u>vllpermitco@aol.com</u>																										
<b>4. Location Identification:</b> Name: <u>Gamma State</u> Number: <u>14-15</u> County: <u>MOFFAT</u> QuarterQuarter: <u>LOT 4</u> Section: <u>15</u> Township: <u>7N</u> Range: <u>93W</u> Meridian: <u>6</u> Ground Elevation: <u>6469</u> 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: <u>606</u> feet <u>FSL</u> , from North or South section line, and <u>659</u> feet <u>FWL</u> , from East or West section line. Latitude: <u>40.552353</u> Longitude: <u>-107.826786</u> PDOP Reading: <u>1.6</u> Date of Measurement: <u>02/14/2011</u> Instrument Operator's Name: <u>Gary Streeter</u>																												
<b>5. Facilities (Indicate the number of each type of oil and gas facility planned on location):</b> <table style="width: 100%; border: none;"> <tr> <td>Special Purpose Pits: <input type="text"/></td> <td>Drilling Pits: <input type="text"/></td> <td>Wells: <input type="text" value="4"/></td> <td>Production Pits: <input type="text" value="1"/></td> <td>Dehydrator Units: <input type="text"/></td> </tr> <tr> <td>Condensate Tanks: <input type="text"/></td> <td>Water Tanks: <input type="text" value="1"/></td> <td>Separators: <input type="text" value="4"/></td> <td>Electric Motors: <input type="text"/></td> <td>Multi-Well Pits: <input type="text"/></td> </tr> <tr> <td>Gas or Diesel Motors: <input type="text"/></td> <td>Cavity Pumps: <input type="text"/></td> <td>LACT Unit: <input type="text"/></td> <td>Pump Jacks: <input type="text" value="4"/></td> <td>Pigging Station: <input type="text"/></td> </tr> <tr> <td>Electric Generators: <input type="text"/></td> <td>Gas Pipeline: <input type="text" value="1"/></td> <td>Oil Pipeline: <input type="text"/></td> <td>Water Pipeline: <input type="text"/></td> <td>Flare: <input type="text" value="1"/></td> </tr> <tr> <td>Gas Compressors: <input type="text"/></td> <td>VOC Combustor: <input type="text"/></td> <td>Oil Tanks: <input type="text" value="6"/></td> <td>Fuel Tanks: <input type="text"/></td> <td></td> </tr> </table> Other: <u>3 - Meter Runs</u>				Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="4"/>	Production Pits: <input type="text" value="1"/>	Dehydrator Units: <input type="text"/>	Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="4"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>	Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text" value="4"/>	Pigging Station: <input type="text"/>	Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text" value="1"/>	Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text"/>	Oil Tanks: <input type="text" value="6"/>	Fuel Tanks: <input type="text"/>	
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6. Construction:

Date planned to commence construction: 05/01/2011 Size of disturbed area during construction in acres: 2.20  
Estimated date that interim reclamation will begin: 08/01/2011 Size of location after interim reclamation in acres: 1.50  
Estimated post-construction ground elevation: 6468 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: \_\_\_\_\_  
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: 1478, public road: 3801, above ground utilit: 3801  
, railroad: 5280, property line: 606

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: 50: Cushool Fine 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: \_\_\_\_\_

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: 1633, water well: 5650, depth to ground water: 90

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:**

This location is being amended to include 3 new directional wells.

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

Signed: \_\_\_\_\_ Date: 03/24/2011 Email: vllpermitco@aol.com

Print Name: Venessa Langmacher Title: Regulatory Supervisor

**IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.**

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. Neslin Director of COGCC Date: 4/17/2011

**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.**

**GENERAL SITE COAs:**

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

Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks 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 (per Rule 604.a.(4)).

Berms or other containment devices shall be constructed in compliance with Rule 604.a.(4) around crude oil, condensate, and produced water storage tanks.

**Attachment Check List**

Att Doc Num	Name
2033687	CORRESPONDENCE
2089422	MULTI-WELL PLAN
400140862	FORM 2A SUBMITTED
400146240	NRCS MAP UNIT DESC
400146241	ACCESS ROAD MAP
400146242	CONST. LAYOUT DRAWINGS
400146244	HYDROLOGY MAP
400146245	LOCATION DRAWING
400146246	LOCATION PICTURES
400146247	REFERENCE AREA MAP
400146248	REFERENCE AREA PICTURES

Total Attach: 11 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
OGLA	Initiated/Completed OGLA Form 2A review on 04-05-11 by Dave Kubeczko; requested acknowledgement of flowback to tanks, tank berming, and cuttings low moisture content COAs from operator on 04-05-11; received acknowledgement of COAs from operator on 04-06-11; passed by CDOW on 03-28-11 (passed manually by COGCC on 04-05-11) with BLM stipulations and COAs acceptable; passed OGLA Form 2A review on 04-15-11 by Dave Kubeczko; flowback to tanks, tank berming, and cuttings low moisture content COAs.	4/5/2011 2:19:53 PM
Permit	Multi-well plan has been submitted	4/1/2011 10:58:22 AM
Permit	State Land Board has verified bond and given permission to proceed with these locations	3/29/2011 8:49:01 AM
DOW	CDOW has reviewed the controlled surface use agreement between the operator and the LSFO of BLM. This location is on federal surface and extracting state minerals. The location is therefore a federal action and subject to federal stipulations. CDOW affirms that the stipulations as defined by the surface use agreement to be conditions of approval for the protection of elk winter concentration areas and mule deer critical winter range.  Submitted by:Ed Winters, Land Use Specialist  28 March 2011 @ 10:48	3/28/2011 10:52:20 AM
Permit	Changed QQ to lot 4 and removed surf bond as it is federal Missing multi-well plan State minerals SLB approval pending	3/28/2011 10:41:01 AM

Total: 5 comment(s)

**BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>

Total: 0 comment(s)