


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		<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>Document Number: 400170263</p>	DE	ET	OE	ES																					
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Oil and Gas Location Assessment			<p>Location ID: 423933</p> <p>Expiration Date: 06/28/2014</p>																									
<p> <input checked="" type="checkbox"/> New Location <input type="checkbox"/> Amend Existing Location Location#: _____ </p>																												
<p>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.</p>																												
<p><input checked="" type="checkbox"/> This location assessment is included as part of a permit application.</p>																												
1. CONSULTATION <p> <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. </p>																												
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: Stoddard Number: 33-30 County: MOFFAT QuarterQuarter: NW SE Section: 30 Township: 6N Range: 90W Meridian: 6 Ground Elevation: 6610 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: 2160 feet FSL, from North or South section line, and 2016 feet FEL, from East or West section line. Latitude: 40.447344 Longitude: -107.531681 PDOP Reading: 1.9 Date of Measurement: 05/03/2011 Instrument Operator's Name: McCoy Anderson																												
5. Facilities (Indicate the number of each type of oil and gas facility planned on location): <table style="width: 100%; border: none;"> <tr> <td>Special Purpose Pits: <input type="text"/></td> <td>Drilling Pits: <input type="text" value="1"/></td> <td>Wells: <input type="text" value="1"/></td> <td>Production Pits: <input type="text"/></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="2"/></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" value="1"/></td> <td>Cavity Pumps: <input type="text"/></td> <td>LACT Unit: <input type="text"/></td> <td>Pump Jacks: <input type="text" value="1"/></td> <td>Pigging Station: <input type="text"/></td> </tr> <tr> <td>Electric Generators: <input type="text"/></td> <td>Gas Pipeline: <input type="text"/></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="2"/></td> <td>Fuel Tanks: <input type="text"/></td> <td></td> </tr> </table> Other: 1 Heater Treater				Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text" value="1"/>	Wells: <input type="text" value="1"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>	Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="2"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>	Gas or Diesel Motors: <input type="text" value="1"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text" value="1"/>	Pigging Station: <input type="text"/>	Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text"/>	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="2"/>	Fuel Tanks: <input type="text"/>	
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6. Construction:

Date planned to commence construction: 07/01/2011 Size of disturbed area during construction in acres: 2.33
Estimated date that interim reclamation will begin: 10/01/2011 Size of location after interim reclamation in acres: 1.00
Estimated post-construction ground elevation: 6608 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: 04/15/2011
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 Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 528, public road: 3772, above ground utilit: 1810
, railroad: 5280, property line: 642

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: 99: Hesperus Fine Sandy Loam 2-15%

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: 05/03/2011

List individual species: Recently Planted Haymeadow

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: 821, water well: 549, depth to ground water: 117

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:

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

Signed: _____ Date: 06/03/2011 Email: lspermitco@aol.com

Print Name: Lisa Smith Title: President

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 G. Neslin

Director of COGCC

Date: 6/29/2011

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.

No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.

Reserve pit must be lined or a closed loop system must be implemented during drilling.

Berms or other containment devices shall be constructed to be sufficiently impervious to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

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.

Flowback and stimulation fluids must be sent to tanks and/or filters before the fluids can be placed into any pipeline or pit. 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.

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.

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

Attachment Check List

Att Doc Num	Name
2033883	CORRESPONDENCE
400170263	FORM 2A SUBMITTED
400171608	ACCESS ROAD MAP
400171609	CONST. LAYOUT DRAWINGS
400171610	HYDROLOGY MAP
400171612	LOCATION PICTURES
400171615	LOCATION DRAWING
400171616	REFERENCE AREA MAP
400171617	REFERENCE AREA PICTURES
400171618	NRCS MAP UNIT DESC
400171973	SURFACE AGRMT/SURETY

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
DOW	<p>The following BMPs should be attached to the permit. These are the same BMPs agreed to for the Quicksilver 21-21, 22-24ND, and 44-6 well pads via email on June 7, 2011.</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>Conduct post-development activities well site visitations between the hours of 10:00 A.M. and 3:00 P.M. and reduce well site visitations between December 1 and April 15 (emergencies exempted).</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>Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.</p> <p>by Michael Warren on Monday, June 27, 2011 at 10:25 A.M.</p>	6/27/2011 10:24:07 AM
OGLA	Initiated/Completed OGLA Form 2A review on 06-12-11 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 06-12-11; received acknowledgement of COAs from operator on 06-13-11; passed by CDOW on 06-27-11 with operator agreed to BMPs acceptable; passed OGLA Form 2A review on 06-27-11 by Dave Kubeczko; fluid containment, spill/release BMPs, lined pits/closed loop, moisture content cuttings, flowback to tanks, and tank berming COAs.	6/12/2011 2:29:07 PM
Permit	Received corrected SUA, plugging bond & number of wells entered.	6/6/2011 4:18:57 PM
Permit	Requesting: the SUA Dollar amounts redacted, and scanned upright, the plugging bond entered, the number of wells entered.	6/6/2011 10:20:34 AM

Total: 4 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Wildlife	<p>Conduct post-development activities well site visitations between the hours of 10:00 A.M. and 3:00 P.M. and reduce well site visitations between December 1 and April 15 (emergencies exempted).</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>Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads.</p>

Total: 1 comment(s)