

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:

400321060

Date Received:

08/28/2012

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:

**430655**

Expiration Date:

**10/29/2015**

☒ 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: 47120

Name: KERR-MCGEE OIL & GAS ONSHORE LP

Address: P O BOX 173779

City: DENVER State: CO Zip: 80217-3779

3. Contact Information

Name: Cheryl Light

Phone: (720) 929-6461

Fax: (720) 929-7461

email: cheryl.light@anadarko.com

4. Location Identification:

Name: SPARBOE Number: 7N-3HZ

County: WELD

QuarterQuarter: NWNE Section: 34 Township: 2N Range: 65W Meridian: 6 Ground Elevation: 4977

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: 280 feet FNL, from North or South section line, and 1519 feet FEL, from East or West section line.

Latitude: 40.101501 Longitude: -104.645921 PDOP Reading: 2.2 Date of Measurement: 03/15/2012

Instrument Operator's Name: SHAUN LEE

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="text" value="2"/>	Wells: <input type="text" value="4"/>	Production Pits: <input type="checkbox"/>	Dehydrator Units: <input type="checkbox"/>
Condensate Tanks: <input type="checkbox"/>	Water Tanks: <input type="checkbox"/>	Separators: <input type="text" value="4"/>	Electric Motors: <input type="checkbox"/>	Multi-Well Pits: <input type="checkbox"/>
Gas or Diesel Motors: <input type="checkbox"/>	Cavity Pumps: <input type="checkbox"/>	LACT Unit: <input type="checkbox"/>	Pump Jacks: <input type="text" value="4"/>	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"/>	Fuel Tanks: <input type="checkbox"/>	

Other: Drilling pits will be used by pre-spud rig.

6. Construction:

Date planned to commence construction: 11/30/2012 Size of disturbed area during construction in acres: 10.00  
Estimated date that interim reclamation will begin: 04/15/2013 Size of location after interim reclamation in acres: 0.04  
Estimated post-construction ground elevation: 4977 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: 06/18/2012  
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 20010125

## 8. Reclamation Financial Assurance:

☒ Well Surety ID: 20010124 ☐ 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: 5660, public road: 280, above ground utilit: 280  
, railroad: 46000, property line: 280

## 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: 69 Valent sand, 0 to 3 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: 08/21/2012

List individual species: Blue grama grass-Chondrosum gracile, Needle-and-Thread-Hesperostipa comata, Sandreed-Calamoviafa longifolia, Russian thistle-Salsola australis

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): Blue Grama Mixed Grass/Mixed Forb Rangeland

### 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: 1224, water well: 2926, depth to ground water: 20

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:

Closest water well permit #: 268020/The surface location of this well is an exception to Rule 318A.a and to Rule 318A.c. This well is not within the GWA surface location window and does not meet the twinning requirement due to the number of wells planned for this area and at the request of the surface owner. An exception location request letter and signed waivers are attached to the Form 2 and Form 2A.

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

Signed: \_\_\_\_\_ Date: 08/28/2012 Email: DJRegulatory@anadarko.com

Print Name: Cheryl Light Title: Sr. Regulatory Analyst

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: \_\_\_\_\_

Director of COGCC

Date: 10/30/2012

**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.**

### **Attachment Check List**

Att Doc Num	Name
2086147	ACCESS ROAD MAP
2086149	CORRESPONDENCE
400321060	FORM 2A SUBMITTED
400321062	MULTI-WELL PLAN
400321063	30 DAY NOTICE LETTER
400321064	HYDROLOGY MAP
400321067	LOCATION DRAWING
400321068	LOCATION PICTURES
400321069	REFERENCE AREA PICTURES
400321072	NRCS MAP UNIT DESC
400321073	WELL LOCATION PLAT
400321074	TOPO MAP
400321076	EXCEPTION LOC REQUEST
400321077	EXCEPTION LOC WAIVERS
400321078	WASTE MANAGEMENT PLAN

Total Attach: 15 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
OGLA	Uploaded new Access Road Map and associated correspondence from the Operator, changed status from HOLD to IN PROCESS.	10/26/2012 3:27:36 PM
OGLA	COGCC phone call with Operator. Discussed access & road concerns expressed by Town of Hudson. Operator has submitted proposed Best Management Practices to address traffic and road impacts. Operator is considering alternate routing for truck traffic, and will provide a revised access road map. Pending receipt and review, this Form 2A is ready to pass.	10/25/2012 4:38:02 PM
Final Review	on hold to follow up on traffic BMPs	10/14/2012 9:23:39 PM
Permit	Final Review Completed. LGD comment addressed (see BMP's added); no public comment received.	10/12/2012 3:40:31 PM
OGLA	Removed the production related equipment from the list of facilities after consultation with the Operator.	10/12/2012 11:45:59 AM
OGLA	Added site specific BMPs that were provided by the Operator.	10/9/2012 4:27:57 PM
OGLA	Placed ON HOLD pending discussions with operator relating to traffic concerns identified by Town of Hudson.	9/21/2012 12:18:24 PM
OGLA	Notified operator of LGD comment, pending response	9/19/2012 7:59:23 AM

LGD	<p>The wells represented in this application are part of what Anadarko/Kerr McGee has represented to the Town as a cluster of a proposed 28 wells, all of which are on land just outside of the municipal boundaries of the Town of Hudson, and all of which are proposed to be accessed through the town. The Town's primary concerns are related to traffic and the impact of the traffic on road surfaces.</p> <p>At this time there is no definitive information regarding the number of vehicles, the timing of trips to serve the drilling and completion operation of the proposed wells, nor the weights of the rigs, water trucks and other associated traffic. There should be a traffic study that examines this information and forecasts the impact on traffic level of service on roads within and near the town, especially at the Highway 52/I-76 interchange. Without such information and study the Town is unable to negotiate with the company regarding mitigation of the impacts.</p> <p>At this time the Town of Hudson has an overweight vehicle ordinance that restricts use of town streets by vehicles in excess of 20,000 pounds GVW that do not have business in town. Heavy trucks serving these wells would violate that ordinance. Again, without good information related to the traffic and its anticipated impacts, the Town is unable to negotiate permits or other solutions to the regulatory problem. And since the wells themselves are outside of Hudson, the town is unable to apply its Use by Special Review permitting process through which such issues are resolved.</p> <p>There are also errors in the application. The town boundaries of Hudson are not delineated on the location maps. And references to County Road 47 are erroneous. CR47 on the maps is in fact the Town's Oak Street.</p> <p>The site identified in this application is adjacent to a 1 million gallon municipal water tank. The access road contains valve boxes and manholes along the associated water main. Precautions should be taken to protect the municipal water facilities from the drilling, completion and operation phases of the well project.</p> <p>We request that the COGCC require a competent traffic study of the drilling, completion and operating phases of these wells prior to approving permits. And, the person or firm who is to prepare the study should consult with the Town regarding the scope of the study. Anadarko should be required to negotiate an agreement with the Town that addresses traffic and road condition impacts.</p>	9/18/2012 4:47:03 PM
OGLA	Reviewed 9/11/2012.	9/11/2012 10:58:47 AM
Permit	ok to pass.	9/4/2012 10:25:04 AM

Total: 11 comment(s)

### **BMP**

<u>Type</u>	<u>Comment</u>
Planning	Anadarko will provide the Town of Hudson an emergency response plan prior to commencing operations
Drilling/Completion Operations	Anadarko will perform a road impact study for all roads belonging to the Town of Hudson prior to operations and then a second road impact study subsequent to drilling and completion operations. Anadarko will pay for all required fixes to ensure any damaged roads are brought back to their condition prior to our operations.
Site Specific	In conjunction with the Town of Hudson, Anadarko will develop a site specific traffic management plan that will address the following: (1) expected traffic and timing of such traffic, (2) how traffic in busy or sensitive intersections will be managed and mitigated, and (3) what truck traffic restrictions will be put in place, if any
Planning	Anadarko will take appropriate steps to adequately protect valve boxes and manholes located along any of our access roads

Total: 4 comment(s)