

FORM  
2A

Rev  
08/13

# 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:

400834427

**(SUBMITTED)**

Date Received:

05/07/2015

## Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: \_\_\_\_\_

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location 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. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

Expiration Date:

This location assessment is included as part of a permit application.

### 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.

### Operator

Operator Number: 47120  
 Name: KERR MCGEE OIL & GAS ONSHORE LP  
 Address: P O BOX 173779  
 City: DENVER      State: CO      Zip: 80217-3779

### Contact Information

Name: CHERYL LIGHT  
 Phone: (720) 929-6461  
 Fax: (720) 929-7461  
 email: cheryl.light@anadarko.com

### RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20010124       Gas Facility Surety ID: \_\_\_\_\_  
 Waste Management Surety ID: \_\_\_\_\_

### LOCATION IDENTIFICATION

Name: ADAMSON      Number: 14N-28HZ  
 County: WELD  
 Quarter: NWSW    Section: 21    Township: 2N    Range: 65W    Meridian: 6    Ground Elevation: 4892

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 2384 feet FSL from North or South section line  
1262 feet FWL from East or West section line

Latitude: 40.123313      Longitude: -104.673903

PDOP Reading: 1.3      Date of Measurement: 12/05/2014

Instrument Operator's Name: ROB WILSON

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

**This proposed Oil and Gas Location is:**

**LOCATION ID #**                      **FORM 2A DOC #**                     

Well Site is served by Production Facilities

                                          400836251

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	<u>6</u>	Oil Tanks*	<u>          </u>	Condensate Tanks*	<u>          </u>	Water Tanks*	<u>          </u>	Buried Produced Water Vaults*	<u>          </u>
Drilling Pits	<u>          </u>	Production Pits*	<u>          </u>	Special Purpose Pits	<u>          </u>	Multi-Well Pits*	<u>          </u>	Modular Large Volume Tanks	<u>          </u>
Pump Jacks	<u>6</u>	Separators*	<u>          </u>	Injection Pumps*	<u>          </u>	Cavity Pumps*	<u>          </u>	Gas Compressors*	<u>          </u>
Gas or Diesel Motors*	<u>          </u>	Electric Motors	<u>          </u>	Electric Generators*	<u>          </u>	Fuel Tanks*	<u>          </u>	LACT Unit*	<u>          </u>
Dehydrator Units*	<u>          </u>	Vapor Recovery Unit*	<u>          </u>	VOC Combustor*	<u>          </u>	Flare*	<u>          </u>	Pigging Station*	<u>          </u>

## OTHER FACILITIES\*

**Other Facility Type**

**Number**

FLOWLINES	<u>18</u>
GAS PIPELINES	<u>3</u>
OIL PIPELINES	<u>1</u>

\*Those facilities indicated by an asterisk (\*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Please see Comments section. Description of pipelines and flow lines does not fit in space provided.

## CONSTRUCTION

Date planned to commence construction: 06/06/2015 Size of disturbed area during construction in acres: 5.70

Estimated date that interim reclamation will begin: 01/06/2016 Size of location after interim reclamation in acres: 0.01

Estimated post-construction ground elevation: 4892

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Please see Comments section. Disposal description will not fit in space provided.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID:                      or Document Number:                     

Centralized E&P Waste Management Facility ID, if applicable: 149021

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: LINDA S., ELEANORE J.

Phone: 949.250.8785

Address: KEVIN L. ADAMSON AND DENISE  
COOKSEY

Fax: \_\_\_\_\_

Address: 12212 SUNGROVE ST

Email: \_\_\_\_\_

City: GARDEN GROVE State: CA Zip: 92840

Surface Owner:  Fee  State  Federal  Indian

Check all that apply. The Surface Owner:  is the mineral owner

is committed to an oil and Gas Lease

has signed the Oil and Gas Lease

is the applicant

The Mineral Owner beneath this Oil and Gas Location is:  Fee  State  Federal  Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: \_\_\_\_\_

Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation 10/22/2014

## CURRENT AND FUTURE LAND USE

### 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

### 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

## CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	1363 Feet	_____ Feet
Building Unit:	1363 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	1202 Feet	_____ Feet
Above Ground Utility:	252 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	289 Feet	_____ Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

Buffer Zone

Exception Zone

Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: \_\_\_\_\_

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

## SOIL

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.org/> 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: 72 VONA LOAMY SAND, 0 TO 3 PERCENT SLOPES

NRCS Map Unit Name: \_\_\_\_\_

## 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: 03/12/2015

List individual species: Switchgrass – Panicum virgatum, cheatgrass – Bromus tectorum – (NOXIOUS WEED-C-List),  
needlegrass sp. – Stipa sp.

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): Disturbed Grassland (switchgrass, cheatgrass, needlegrass sp.)

## WATER RESOURCES

Is this a sensitive area:  No  Yes

Distance to nearest

downgradient surface water feature: 2030 Feet

water well: 730 Feet

Estimated depth to ground water at Oil and Gas Location 11 Feet

Basis for depth to groundwater and sensitive area determination:

Nearest surface water features:  
Creek: 2030' E, Elev 4890'  
Loc Elev: 4892'  
Nearest water wells:  
730' NNE, Permit 16877, depth 71', Static Water Level 43', Elev 4893'  
1570' W, Permit 817, depth 68', Static Water Level 24', Elev 4905'  
Sensitive Area Determination: SENSITIVE AREA

Is the location in a riparian area:  No  Yes

Was an Army Corps of Engineers Section 404 permit filed  No  Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No  
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: \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)  
 Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)

- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

**RULE 502.b VARIANCE REQUEST**

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

**OPERATOR COMMENTS AND SUBMITTAL**

Comments

Drilling fluids disposal: KMG will reuse water-based drilling fluids to the maximum extent possible, at which point they will either be land applied or taken to a licensed, commercial disposal site; the decision will be based upon laboratory analysis of fluids.  
 KMG will reuse oil-based drilling fluids to the maximum extent possible, at which point they will be returned to the fluids manufacturer for reconditioning or disposal at a licensed, commercial disposal site.

Cuttings disposal: If the surface owner authorizes, and if it is feasible for this location at the time of drilling, water-based cuttings will be disposed of onsite using bioremediation/solidification product.  
 If the surface owner does not authorize onsite disposal and/or it is not feasible for this location at the time of drilling, water-based cuttings will be disposed of using a Centralized E&P Waste Management facility or a private spread field. Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.

Pipelines: Buried pipelines will be utilized to gather the gas and oil product from the location (3 gas pipelines, 1 oil pipeline). Both gas and oil pipelines will be constructed from steel of suitable wall thickness and material grade to meet the respective gathering systems design pressure. Gas pipelines will range in diameter from 4" to 20"; oil pipelines from 4" to 12". Capacity of pipelines will vary based on diameter. Pipelines will begin at the location and terminate at larger trunk lines in the area.  
 Temporary above ground polyethylene water pipelines (diameter 10" – 12" with a 60 BPM capacity) will deliver water to location operations from larger trunk lines.

Flow Lines: 18 flow lines will flow to the production facility location. During production, flow direction in the flow lines is from the well head to the production facility. The size of flow lines is typically 2". Flow lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 1047'.  
 6 fuel gas supply lines will also be installed from the well head to the production facility. During operation flow direction in the supply lines will be from the production facility to the well head. The size of the supply lines is typically 1". Supply lines will be constructed from poly or steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 1047'.  
 Gas lift lines are also occasionally installed (one per well) from the well head to the production facility. During operation flow direction in the gas lift lines will be from the production facility to the well head. The size of the gas lift lines is typically 2". Gas lift lines will be constructed from steel pipe, buried, and will equal the distance between the well heads and the tank battery, approximately 1047'.

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

Signed: \_\_\_\_\_ Date: 05/07/2015 Email: cheryl.light@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: \_\_\_\_\_

**Conditions Of Approval**

**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.**

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	This proposed oil and gas location is located in a rural rangeland area. The nearest building unit is located 1363' away.

Total: 1 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400834427	FORM 2A SUBMITTED
400834434	LOCATION DRAWING
400836296	ACCESS ROAD MAP
400836299	HYDROLOGY MAP
400836303	LOCATION PICTURES
400836304	NRCS MAP UNIT DESC
400836305	MULTI-WELL PLAN
400836380	REFERENCE AREA PICTURES
400836893	WELL LOCATION PLAT
400836894	WASTE MANAGEMENT PLAN

Total Attach: 10 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Submitter is not a designated agent. Return to draft.	5/8/2015 2:14:34 PM

Total: 1 comment(s)