

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:

401137840

Date Received:

11/04/2016

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 443598

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:

443598

Expiration Date:

01/17/2020

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: SHAYELYN MARSHALL
Phone: (720) 9296907
Fax: (720) 9297907
email: SHAYELYN.MARSHALL@ANAD ARKO.COM

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: GABEL Number: 37N-8HZ
County: WELD
Quarter: NWNE Section: 8 Township: 1N Range: 66W Meridian: 6 Ground Elevation: 4939

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: 1015 feet FNL from North or South section line
1546 feet FEL from East or West section line

Latitude: 40.070162 Longitude: -104.797198
PDOP Reading: 1.5 Date of Measurement: 06/20/2016

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

401137843

FACILITIES

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

Wells	10	Oil Tanks*	_____	Condensate Tanks*	_____	Water Tanks*	_____	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	10	Separators*	_____	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	_____
Gas or Diesel Motors*	_____	Electric Motors	_____	Electric Generators*	_____	Fuel Tanks*	_____	LACT Unit*	_____
Dehydrator Units*	_____	Vapor Recovery Unit*	_____	VOC Combustor*	_____	Flare*	_____	Pigging Station*	_____

OTHER FACILITIES*

Other Facility Type

Number

Flow Lines	30
Temp 500 bbl tanks w/optional ECDs	2

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:

Two 500 barrel skid-mounted frac tanks will be temporarily placed onsite for use of the pre-spud rig only. One tank will store water and the other will store water-based mud.

Please see Comments section for flow line description.

CONSTRUCTION

Date planned to commence construction: 02/01/2017 Size of disturbed area during construction in acres: 6.00

Estimated date that interim reclamation will begin: 05/02/2017 Size of location after interim reclamation in acres: 1.20

Estimated post-construction ground elevation: 4939

DRILLING PROGRAM

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

Is H₂S 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: Philip & Joan Gabel

Phone: 970-381-1942

Address: 13504 Weld County Road 12

Fax: _____

Address: _____

Email: _____

City: Fort Lupton State: CO Zip: 80621

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 05/31/2016

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:	591 Feet	_____ Feet
Building Unit:	1286 Feet	_____ Feet
High Occupancy Building Unit:	4211 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	944 Feet	_____ Feet
Above Ground Utility:	918 Feet	_____ Feet
Railroad:	3041 Feet	_____ Feet
Property Line:	165 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.
 - Large UMA Facility – 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: 35—Loup-Boel loamy sands, 0 to 3 percent slopes
- NRCS Map Unit Name: 72—Vona loamy sand, 0 to 3 percent slopes
- NRCS Map Unit Name: 76—Vona sandy loam, 1 to 3 percent slopes

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): _____

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 0 Feet

water well: 719 Feet

Estimated depth to ground water at Oil and Gas Location 23 Feet

Basis for depth to groundwater and sensitive area determination:

Wetlands: 0' E Elev: 4938'
Ditch: 0' E Elev: 4939'
Ditch: 180' N Elev: 4939'
Loc Elev: 4939'
Nearest water wells:
719' ENE, Permit 36032-, depth 848', Static Water Level 98', Elev 4953'
950' NW, Permit 158349--A, depth 35', Static Water Level 9', Elev 4925'
Sensitive Area Determination: SENSITIVE AREA, downgradient surface water feature within 1,000'

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: _____

Is the Location within a Floodplain? No Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other

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 a Building Unit) and is in an Urban Mitigation Area
- 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 The right to construct this Oil and Gas Location is granted by an oil and gas lease and an executed Surface Use Agreement has been attached only as a matter of record.

Jurisdictional wetlands exist north and east of the well pad. However, APC does not anticipate impacts to wetlands and therefore, a Section 404 permit will not be required from the U.S. Army Corps of Engineers. We also plan to stay outside of the ditch located east of the location.

Please note the changes to the amended location below:
 -We have moved the new well pad to be outside of the buffer zone.
 -There were originally 4 wells on this location and now there will be 10, however the surface disturbance increased by only .25 acres.
 -There was originally a facility on this pad but we have removed it and placed it offsite (also outside of the buffer zone).
 -Cultural distances have been revised.

The right to construct this Oil and Gas Location is granted by an oil and gas lease and an executed Surface Use Agreement has been attached only as a matter of record.

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: Water-based cuttings will be disposed of using a Centralized E&P Waste Management facility or a private spread field, depending on what is feasible at the time of drilling. Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site.

Fort Lupton is aware of our plans for this parcel and KMG employees met with the committee on 9/15/16 to understand their concerns related to traffic and noise near the cemetery. KMG committed to coordinate with the Town Clerk/Funeral Planner to ensure we manage traffic during funeral services, but due to safety reasons would not be able to fully stop operations once they began. We also explained that we will continue to work with our scheduling teams to try to avoid conducting operations on the Gabel pad over Memorial Day holiday celebration. We concluded our meeting with a commitment to provide them with operational updates and to contact us with any additional questions or concerns as they come up.

Regarding the access roads, we entered into an Offsite Road Improvements Agreement with the City of Fort Lupton when we permitted the FL Greens wells, it addressed roadway damage and improvements. This agreement also anticipated the traffic that the King and Gabel wells would generate.

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

Signed: _____ Date: 11/04/2016 Email: DJREGULATORY@ANADARKO.COM

Print Name: SHAYELYN MARSHALL Title: 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: Matthew Lee Director of COGCC Date: 1/18/2017

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.

<u>COA Type</u>	<u>Description</u>
	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	The nearest building unit is located 1286' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.
2	Storm Water/Erosion Control	604c.(2).G. Berm Construction: Kerr-McGee will create tertiary containment by construction of a berm or diversion dike, site grading, or other comparable measures sufficient to further protect the wetland and ditch 0' E of this proposed oil and gas location.

Total: 2 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401137840	FORM 2A SUBMITTED
401138178	LOCATION DRAWING
401138179	WELL LOCATION PLAT
401138180	LOCATION PICTURES
401138181	MULTI-WELL PLAN
401138182	HYDROLOGY MAP
401138189	SURFACE AGRMT/SURETY
401138191	WASTE MANAGEMENT PLAN
401140015	ACCESS ROAD MAP
401142925	NRCS MAP UNIT DESC

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Corrected Related Remote Locations to say "Well site is served by - doc no 401137843"	01/17/2017
Permit	Final Review Completed.	01/09/2017
Permit	Permitting Review Complete.	01/06/2017
OGLA	Operator responded to Ft. Lupton's concerns with the access road and added comment to Operator comments section. Other comment was from LGD regarding county requirements. No other public comments, not in a designated set back area. OGLA review complete and task passed.	12/22/2016
LGD	The Operator should coordinate with the City regarding operation times due to its proximity to Hillside Cemetery. The City requests that the Operator contact the City regarding potential changes to the access and use of City roads.	11/28/2016
LGD	This proposed oil and gas facility is located in unincorporated Weld County and surrounded by the City of Fort Lupton. As of today's date, November 28, 2016, the Weld County Oil and Gas Liaison/LGD has not been contacted by any nearby resident(s) or governmental jurisdiction(s) regarding this proposed location. The County will respond to legitimate concerns or issues regarding a proposed location and attempt to facilitate a solution with the operator. Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned District and no land use permitting is required by the County. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. The operator should contact Fort Lupton regarding access roads. Any issues regarding this proposed location will be worked out between Fort Lupton, Weld County, and the operator. Troy Swain, Weld Oil Gas Liaison (970) 400-3579.	11/28/2016
OGLA	OGLA review: Area surrounded by Ft. Lupton and on the edge of a wetlands. BMPs are in place to protect wetlands. Included NRCS to the south where the remote production is located.	11/28/2016
Permit	Passed completeness.	11/08/2016
Permit	Note: Was decided to leave SUA attached.	11/08/2016
Permit	Returned to Draft: * Redact SUA.	11/08/2016

Total: 10 comment(s)