

FORM
2A

Rev
04/18

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:

401624515

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 448107

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:

448107

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: JOHN PIEKARA
 Phone: (720) 9293094
 Fax: (832) 6365848
 email: JOHN.PIEKARA@ANADARKO.COM

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20010124 Gas Facility Surety ID (Rule 711): _____
- Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: SHARON Number: 11-21HZ
 County: WELD
 Quarter: NESW Section: 21 Township: 4N Range: 67W 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: 2358 feet FSL from North or South section line
2207 feet FWL from East or West section line

Latitude: 40.297581 Longitude: -104.897599

PDOP Reading: 1.2 Date of Measurement: 03/01/2018

Instrument Operator's Name: NICK ROADIFER

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 for disposal description.

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: Ronald L. Walter

Phone: 970-539-0962

Address: 9317 WCR 42

Fax: _____

Address: _____

Email: _____

City: Johnstown State: CO Zip: 80534

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: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation 02/22/2018

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:	1372 Feet	1549 Feet
Building Unit:	1372 Feet	1556 Feet
High Occupancy Building Unit:	2834 Feet	3008 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	2199 Feet	2197 Feet
Above Ground Utility:	2918 Feet	2723 Feet
Railroad:	4418 Feet	4599 Feet
Property Line:	269 Feet	76 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: 79—Weld loam, 1 to 3 percent slopes

NRCS Map Unit Name: 82—Wiley-Colby complex, 1 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: _____

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: 3989 Feet

Estimated depth to ground water at Oil and Gas Location 21 Feet

Basis for depth to groundwater and sensitive area determination:

Ditch: 0' Elev: 4931'
Ditch: 258' W Elev: 4950'
Ditch: 699' W Elev: 4951'
Spring/Seep: 717' SE Elev: 4918'

Loc Elev: 4939'

Nearest water wells:

3989' WSW, Permit 45932-MH, depth 18', Static Water Level unknown, Elev 4927'

7700' NNW, Permit 74429-, depth 39', Static Water Level 9', Elev 4786'

Sensitive Area Determination: SENSITIVE AREA, downgradient surface water feature within 1,000'

Location is NOT in floodplain according to Weld County and FEMA

(SWL calc: $4939 - 4918^* = 21$)

Location Elevation - *Spring/Seep Surface Expression Elevation

(No water wells nearby with SWL data)

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

WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on _____

Operator Proposed Wildlife BMPs

No BMP

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

Former name and number: SHARON 4N67W21O
Location ID: 448107

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: 8 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 production facility, approximately 185'.

8 compressed air 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 steel pipe, buried, and will equal the distance between the well heads and the production facility, approximately 185'.

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 production facility, approximately 185'.

CUSTODY TRANSFER: Gas custody transfer occurs at the custody transfer meter located on the proposed production facility location. Oil custody transfer occurs at the LACT Unit located on the proposed production facility location. Oil is transferred from the LACT Unit into a pipeline owned by Anadarko Wattenberg Oil Complex LLC.

Temporary water tanks will be on location for approximately 6 to 9 months, and will be equipped with Temporary ECDs as appropriate to control emissions. Additionally, an earthen berm will be constructed around temporary tanks while on location.

The man-made ditch through the oil and gas location will be filled in.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
 Signed: _____ Date: _____ Email: DJREGULATORY@ANADARKO.COM

Print Name: JOHN PIEKARA 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.

<u>COA Type</u>	<u>Description</u>

Best Management Practices

<u>No BMP/COA Type</u>	<u>Description</u>
1 Planning	The nearest building unit is located 1372' 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	To protect the downgradient man-made ditches during construction a ditch/berm around the pad and sediment traps will be constructed then lined prior to commencing grading of the well pad location. The ditch/berm around the perimeter of the well pad shall mitigate the potential of fluids from an incidental spill at the surface from entering the adjacent ditches.

Total: 2 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401624786	NRCS MAP UNIT DESC
401624787	ACCESS ROAD MAP
401624789	LOCATION DRAWING
401624791	LOCATION PICTURES
401624793	MULTI-WELL PLAN
401624794	WELL LOCATION PLAT
401624823	FACILITY LAYOUT DRAWING
401625540	HYDROLOGY MAP
401641934	SURFACE AGRMT/SURETY
401641936	WASTE MANAGEMENT PLAN

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

No public comments were received on this application during the comment period.

