

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:

401175200

Date Received:

01/06/2017

Oil and Gas Location Assessment

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

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:

**449894**

Expiration Date:

**04/03/2020**

☐ 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: CRAIG RICHARDSON

Phone: (720) 929.6092

Fax: (720) 929.7092

email: CRAIG.RICHARDSON@ANADAR  
KO.COM

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20010124 ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: NEWBY TANK BATTERY Number: 27N-33HZ

County: WELD

QuarterQuarter: NESW Section: 33 Township: 3N Range: 68W Meridian: 6 Ground Elevation: 4919

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: 2489 feet FSL from North or South section line

2223 feet FWL from East or West section line

Latitude: 40.181755 Longitude: -105.009368

PDOP Reading: 6.0 Date of Measurement: 01/07/2016

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 #**

Production Facilities Location serves Well(s)

401162609

336498

## FACILITIES

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

Wells	Oil Tanks*	Condensate Tanks*	2	Water Tanks*	4	Buried Produced Water Vaults*	
Drilling Pits	Production Pits*	Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	Separators*	25	Injection Pumps*	Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*	Electric Motors		Electric Generators*	Fuel Tanks*		LACT Unit*	2
Dehydrator Units*	Vapor Recovery Unit*		VOC Combustor*	2	Flare*		Pigging Station*

## OTHER FACILITIES\*

**Other Facility Type**

**Number**

OIL PIPELINE	1
FLOWLINES	36
GAS PIPELINE	3

\*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: 05/01/2017 Size of disturbed area during construction in acres: 8.25

Estimated date that interim reclamation will begin: 07/31/2017 Size of location after interim reclamation in acres: 6.50

Estimated post-construction ground elevation: 4919

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: \_\_\_\_\_

Is H<sub>2</sub>S anticipated? \_\_\_\_\_

Will salt sections be encountered during drilling: \_\_\_\_\_

Will salt based mud (>15,000 ppm Cl) be used? \_\_\_\_\_

Will oil based drilling fluids be used? \_\_\_\_\_

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: \_\_\_\_\_

Drilling Fluids Disposal Method: \_\_\_\_\_

Cutting Disposal: \_\_\_\_\_

Cuttings Disposal Method: \_\_\_\_\_

Other Disposal Description:

Beneficial reuse or land application plan submitted? \_\_\_\_\_

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: NEWBY FARMS

Phone: 303.776.4127

Address: 12250 CR 5

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

Address: \_\_\_\_\_

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

City: FIRESTONE State: CO Zip: 80504

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 02/15/2016

## 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:	_____ Feet	1774 Feet
Building Unit:	_____ Feet	1911 Feet
High Occupancy Building Unit:	_____ Feet	3010 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	1960 Feet
Above Ground Utility:	_____ Feet	1617 Feet
Railroad:	_____ Feet	2015 Feet
Property Line:	_____ Feet	1 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

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: \_\_\_\_\_

- 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.

## 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 be 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: 16—Colby loam, 3 to 5 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: 616 Feet

Estimated depth to ground water at Oil and Gas Location 3 Feet

Basis for depth to groundwater and sensitive area determination:

NEWBY 27N-33HZ FACILITY

Nearest water wells:

Ditch: 0' E Elev: 4919' (DOWN GRADIENT OF SITE)

Intermittent Stream: 530' E Elev: 4935' (NOT DOWNGRADIENT OF SITE)

Intermittent Stream: 602' W Elev: 4878' (DOWNGRADIENT OF SITE)

Pond: 701' NE Elev: 4893'

Loc Elev: 4919'

616' ESE, Permit 43394-MH, depth unknown, Static Water Level unknown, Elev 4889'

5296' N, Permit 61269-, depth unknown, Static Water Level 26', Elev 4948'

Sensitive Area Determination: SENSITIVE AREA, downgradient surface water feature within 1,000' AND depth to groundwater less than 20'.

DEPTH TO GROUNDWATER CALCULATIONS

(SWL calc:  $(4919 - 4948) + 26 = 3$ )

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 \_\_\_\_\_

## 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

Flow Lines: 12 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 2545'.  
12 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 2545'.  
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 2545'.

Existing Facility shown on location drawing does not have a COGCC Location ID. The existing equipment will be removed and replaced with the equipment identified under the Facilities section of the submittal.

The nearest building unit is located 1911' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.

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

Signed: \_\_\_\_\_ Date: 01/06/2017 Email: DJREGULATORY@ANADARKO.COM

Print Name: CRAIG RICHARDSON Title: REGULATORY ANALYST II

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: 4/4/2017

### 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.

#### COA Type

#### Description

	The Approved Form 2A permit will be posted at the location during construction.
--	---

### Best Management Practices

#### No BMP/COA Type

#### Description

1	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 ditch once relocated currently located 0' east of this proposed oil and gas location and the intermittent stream located 602' to the west.
---	-----------------------------	---

Total: 1 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2316055	FACILITY LAYOUT DRAWING
401175200	FORM 2A SUBMITTED
401179059	HYDROLOGY MAP
401179067	LOCATION DRAWING
401179070	NRCS MAP UNIT DESC
401179120	ACCESS ROAD MAP
401179132	LOCATION PICTURES
401179457	FACILITY LAYOUT DRAWING
401179575	WASTE MANAGEMENT PLAN

Total Attach: 9 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	04/03/2017
Permit	Permitting Review Complete.	02/24/2017
OGLA	Spoke with the Operator via phone and moved the BMP regarding the location in a designated setback to the comments section. Operator has provided a BMP for the sensitive water area. LGD commented on Weld County requirements. No public comments were made to the LGD or COGCC. OGLA review complete and task passed.	02/13/2017
OGLA	Operator sent a more detailed facility layout drawing (attachment 2316055) showing where things are located. The surface owner is the same to the east where the current facilities cross the property line. Tanks will be at a distance that meets the 605.a.(2). rule for setbacks to property lines.	02/09/2017
LGD	This proposed oil and gas facility is located in unincorporated Weld County. As of today's date, February 2, 2017, the Weld County Oil and Gas Liaison/LGD has not been contacted by any nearby resident(s) or governmental jurisdiction(s) regarding this proposed production facility location or the associated well pad location. The County will respond to legitimate concerns or issues regarding a proposed location and attempt to facilitate a solution with the operator. The COGCC Form 2A for this location was submitted on or before February 1, 2017 and is considered a Use by Right with no Weld Oil and Gas Location Assessment (WOGLA) required. A building permit is required for production equipment (tank battery, separators, compressors, generators, etc.) from the Department of Planning Services. Proposed access is from Weld County Road 5, which is County owned and maintained. Access points from County roads require Access Permits from the Department of Public Works, which include any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a Right-Of-Way Permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579.	02/02/2017
OGLA	OGLA review: Production location only - no wells and not in a designated setback area. Check with Operator on equipment being 1 ft from the property line. Operator estimated depth to water to be approximately 3 feet. Monitoring wells in the area are screened between 5 and 15 feet below ground surface.	01/27/2017
Permit	Passed completeness.	01/17/2017

Total: 7 comment(s)