

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:

400567648

Date Received:

04/07/2014

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:

437337

Expiration Date:

05/25/2017

☐ 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: ACORD STATE TANK BATTERY Number: 34N-30HZ

County: WELD

QuarterQuarter: SESE Section: 30 Township: 3N Range: 67W Meridian: 6 Ground Elevation: 4820

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: 1005 feet FSL from North or South section line

1065 feet FEL from East or West section line

Latitude: 40.192570 Longitude: -104.927104

PDOP Reading: 6.0 Date of Measurement: 07/17/2013

Instrument Operator's Name: BEN HARDENBERGH

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)

330347

329589

FACILITIES

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

Wells	Oil Tanks	8	Condensate Tanks	Water Tanks	2	Buried Produced Water Vaults		
Drilling Pits	Production Pits		Special Purpose Pits	Multi-Well Pits		Temporary Large Volume Above Ground Tanks		
Pump Jacks	Separators	12	Injection Pumps	Cavity Pumps				
Gas or Diesel Motors	Electric Motors		Electric Generators	Fuel Tanks		Gas Compressors		
Dehydrator Units	Vapor Recovery Unit	3	VOC Combustor	1	Flare	1	LACT Unit	2
							Pigging Station	

OTHER FACILITIES

Other Facility Type

Number

Oil pipeline	1
Gas pipeline	3
Flow lines	33

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: 08/10/2014 Size of disturbed area during construction in acres: 10.00

Estimated date that interim reclamation will begin: 11/10/2014 Size of location after interim reclamation in acres: 5.00

Estimated post-construction ground elevation: 4820

DRILLING PROGRAM

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

Is H₂S 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: Acord St Vrain

Phone: 720-581-8802

Address: Valley Ranch LLC

Fax: _____

Address: 7541 CR 26.75

Email: _____

City: Longmont 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 10/09/2013

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

Distance to nearest:

Building: 3278 Feet
Building Unit: 3278 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 3139 Feet
Above Ground Utility: 3139 Feet
Railroad: 5138 Feet
Property Line: 211 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.

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: _____

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: 50 OTERO SANDY LOAM, 0 TO 1 PERCENT SLOPES

NRCS Map Unit Name: 68 USTIC TORRIORTHENTS, MODERATELY STEEP

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: 02/28/2014

List individual species: redstem filaree- Erodium cicutarium, burning-bush- Bassia sieversiana, cereal rye - Secal cereal

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: 200 Feet

water well: 1390 Feet

Estimated depth to ground water at Oil and Gas Location 0 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area determination: Surface water feature within 1000'.
Basis for depth to groundwater: Identified water well (Permit # 19874-MH) located approximately 2951' north of the proposed oil and gas location. Depth to groundwater at water well is 6' and the water well is at an elevation of approximately 4870'.

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

The existing facilities located north of this proposed oil and gas location will be removed (depicted as #6 on attached location drawing).

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: Eleven 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 5000'. Eleven 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 5000'.

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 5000'.

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

Signed: _____ Date: 04/07/2014 Email: DJRegulatory@anadarko.com

Print Name: Lauren Kucera 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: Matthew Lee Director of COGCC Date: 5/26/2014

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

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Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	The nearest building unit is located 3278' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.
2	Pre-Construction	Drainage and hydrologic considerations have been incorporated for site design and layout.
3	Storm Water/Erosion Control	Anadarko has developed a comprehensive Emergency Response & Oil Spill Contingency Plan that outlines a command structure for response personnel, mobilization of employee and response contractors, and notification procedures for local, state, and federal regulatory agencies. An inventory of all wells and production facilities in the floodplain, with associated elevation, will be maintained and provided to the COGCC annually and upon request. Facilities in floodplains will be conducted annually for flood preparedness.
4	Construction	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 wetlands located 200' south of the proposed oil and gas location.
5	Construction	Tanks will be ground anchored with engineered anchors. Enhanced tank connections will be utilized to minimize susceptibility to movement. Lined (synthetic or geosynthetic), steel containment will be installed around production tanks which will be constructed on compacted fill to reduce sub-grade failure. All flowlines will be buried a minimum of 4 feet below ground surface. Automation will be installed to allow for remote shut in of equipment.

Total: 5 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400567648	FORM 2A SUBMITTED
400573416	LOCATION DRAWING
400573417	NRCS MAP UNIT DESC
400573418	SURFACE AGRMT/SURETY
400573419	WASTE MANAGEMENT PLAN
400573422	ACCESS ROAD MAP
400575606	REFERENCE AREA PICTURES
400581021	HYDROLOGY MAP
400585899	LOCATION PICTURES

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	5/22/2014 10:35:12 AM
OGLA	Added floodplain BMP for the tank battery. The tank battery will be located as shown on the Location Drawing, the existing facilities will be removed. The tank battery will be located outside of (above) the floodplain, but proximity to the floodplain makes the BMP prudent.	5/20/2014 3:22:06 PM
Permit	ok to pass.	4/15/2014 9:25:46 AM
OGLA	Requested possibility of moving facility north to the location of the existing facilities that are intended to be removed. Also requesting site specific flood protection and spill prevention BMP.	4/10/2014 10:29:06 AM
Permit	Location pictures corrected. Form passes completeness.	4/8/2014 11:50:50 AM
Permit	Location pics have East/West mis-labeled. Form back to draft.	4/8/2014 8:23:10 AM

Total: 6 comment(s)