

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:

400859787

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Date Received:

06/26/2015

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:

**442678**

Expiration Date:

**07/30/2018**

☒ 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: 10446

Name: MUSTANG CREEK OPERATING LLC

Address: 5251 DTC PARKWAY #800

City: GREENWOOD VILLAGE State: CO Zip: 80111

Contact Information

Name: Stewart Ward

Phone: (480) 751-7833

Fax: ( )

email: sward@fifthcreekenergy.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20130024 ☐ Gas Facility Surety ID: \_\_\_\_\_

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

LOCATION IDENTIFICATION

Name: Callaway Number: 3-33

County: ELBERT

QuarterQuarter: NWSE Section: 3 Township: 13S Range: 58W Meridian: 6 Ground Elevation: 5733

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: 1932 feet FSL from North or South section line

1705 feet FEL from East or West section line

Latitude: 38.944970 Longitude: -103.874330

PDOP Reading: 1.5 Date of Measurement: 06/17/2015

Instrument Operator's Name: Scott Estabrooks

## 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 #

## FACILITIES

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

Wells	<u>1</u>	Oil Tanks*	<u>2</u>	Condensate Tanks*	<u>      </u>	Water Tanks*	<u>1</u>	Buried Produced Water Vaults*	<u>      </u>
Drilling Pits	<u>1</u>	Production Pits*	<u>      </u>	Special Purpose Pits	<u>      </u>	Multi-Well Pits*	<u>      </u>	Modular Large Volume Tanks	<u>      </u>
Pump Jacks	<u>1</u>	Separators*	<u>1</u>	Injection Pumps*	<u>      </u>	Cavity Pumps*	<u>      </u>	Gas Compressors*	<u>      </u>
Gas or Diesel Motors*	<u>1</u>	Electric Motors	<u>      </u>	Electric Generators*	<u>      </u>	Fuel Tanks*	<u>1</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

\*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:

1 - 3" steel line will run from the wellhead to the production facility

## CONSTRUCTION

Date planned to commence construction: 07/27/2015 Size of disturbed area during construction in acres: 3.90  
Estimated date that interim reclamation will begin: 10/01/2015 Size of location after interim reclamation in acres: 0.80  
Estimated post-construction ground elevation: 5733

## 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? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Method: Evaporation  
Cutting Disposal: ONSITE Cuttings Disposal Method: Drilling pit  
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: Catherine Callaway

Phone: 719-541-2843

Address: 5586 County Rd 165

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

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

Email: cattiecallaway@outlook.com

City: Ramah State: CO Zip: 80832

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 06/17/2015

### 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:	2570 Feet	4281 Feet
Building Unit:	3140 Feet	4505 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	1694 Feet	23 Feet
Above Ground Utility:	3090 Feet	3093 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	690 Feet	28 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 (onll 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: AnD - Ascalon sandy loam, 5 - 9 % slopes

NRCS Map Unit Name: PmB - Platner loam, 1 - 3% slopes

NRCS Map Unit Name: PmA - Platner loam, 0 - 1% 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: 06/23/2015

List individual species: see list attached

### 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: 81 Feet

water well: 2802 Feet

Estimated depth to ground water at Oil and Gas Location 12 Feet

Basis for depth to groundwater and sensitive area determination:

Water well Receipt # 9077815

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 zone: No

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 609

## 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 AnC - Ascalon sandy loam, 3 - 5% slopes  
SnE - Stoneham sandy loam, 5 - 18% slopes  
StC2 - Stoneham complex, 1 - 5% slopes, eroded

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

Signed: \_\_\_\_\_ Date: 06/26/2015 Email: sward@fifthcreekenergy.com

Print Name: Stewart Ward Title: Drilling Manager

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: 7/31/2015

### **Surface Owner Information**

Owner Name	Address	Phone	Fax	Email
Catherine Callaway	5586 County Rd 165 Ramah, CO 80832	719-541-2843		cattiecallaway@outlook.com
Rebecca A Callaway	5586 County Rd 165 Ramah, CO 80832	719-541-2843		Becki-6cal@hotmail.com

2 Surface Owner(s)

### **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.**

<b>COA Type</b>	<b>Description</b>
	The proposed location is in a sensitive area with potential shallow groundwater and within proximity to a surface water feature. Secondary containment areas for tanks shall be constructed of steel rings, designed and installed to prevent leakage and resist degradation from erosion or routine operation and shall be constructed with a synthetic or engineered liner that contains all primary containment vessels and flowlines and is mechanically connected to the steel ring to prevent leakage. In addition, tertiary containment will be installed along the down- and cross-gradient perimeters of the Location to minimize the potential for sediment and/or contaminant migration into the surface water features.
	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.

### **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Traffic control	2. Water Supply and Quality. To reduce truck traffic, where feasible, temporary surface water lines are encouraged and will be utilized. If necessary, Operator will bury temporary water lines at existing driveway and gravel road crossings, or utilize existing culvert, if available.
2	Traffic control	6. Private Roads. The Operator agrees to construct (unless already constructed) and maintain an access road designed to accommodate emergency response vehicles such as, but not limited to, law enforcement, emergency command vehicles, ambulances, hazard materials response vehicles, water, tenders, and fire apparatus during construction and operation of new tank batteries (post MOU), new drilling activity and reworks or recompletions of existing wells. With respect to new roads to new tank batteries, the Operator agrees to construct access roads in accordance with the Elbert County Driveway Standards. Best efforts will be made to improve inadequate access to existing tank battery sites identified by the local fire district or County. Operator and County agree that spot inspections of access roads may be done by the County and/or appropriate emergency response agency, at such County or agency's sole risk and expense, to ensure compliance with this section.
3	Storm Water/Erosion Control	1. Berms. Operator will inspect berms on a weekly basis for evidence of discharge and within 48 hrs of a precipitation event. Inspection and maintenance records will be provided to the county on request.
4	Material Handling and Spill Prevention	3. Spill and Release Maintenance. Operator will submit copies of any Form 19 filed with COGCC to the County LGD.
5	Dust control	1. Dust Mitigation. Operator shall use only fresh water (as defined by the Commission) on roads or land surfaces for dust mitigation.
6	Noise mitigation	5. Noise. Operator shall provide to the LGD 24 hr, 7 days a week contact information to respond to all noise complaints arising from Operator's oil and gas facilities.
7	Drilling/Completion Operations	While gas is not expected, solution gas may be present from oil production. It is intended that any solution gas will be handled through a gas burner and not flared.
8	Interim Reclamation	4. Weed Control and Maintenance. Operator shall be responsible for noxious weed control on any disturbed area, from the construction phase to the closure of the well or facility.

Total: 8 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
901273	SURFACE AGRMT/SURETY
901283	OTHER
1009920	NRCS MAP UNIT DESC
1009921	NRCS MAP UNIT DESC
1009922	NRCS MAP UNIT DESC
1009923	HYDROLOGY MAP
1009924	LOCATION PICTURES
400859787	FORM 2A SUBMITTED
400859794	NRCS MAP UNIT DESC
400859795	NRCS MAP UNIT DESC
400859799	ACCESS ROAD MAP
400859801	ECOLOGIC RESOURCE SURVEY
400859802	CONST. LAYOUT DRAWINGS
400859803	LOCATION DRAWING
400859804	OTHER
400859805	REFERENCE AREA MAP
400859806	REFERENCE AREA PICTURES
400859807	WELL LOCATION PLAT

Total Attach: 18 Files



## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	7/31/2015 3:57:47 PM
OGLA	Per Operator request, added all BMPs based on the MOU with Elbert County.  Per Operator request, added Gas Flaring BMP.	7/30/2015 12:44:10 PM
Permit	Attached MOU document (901283) per operator request.	7/29/2015 11:32:16 AM
OGLA	Operator concurrence for all changes and COA via email - 07/23/2015	7/24/2015 10:55:52 AM
OGLA	Changed Facility Layout Drawing to "Other" Does not meet the requirements of a Facility Layout Drawing	7/23/2015 12:52:33 PM
OGLA	Based on the review of FEMA FIRM Panel #08039C1050C, Location does not lie within a Floodplain	7/17/2015 5:08:13 PM
OGLA	Changed Distance to Nearest Surface Water Feature to 81 feet based on the Hydrology Map submitted by the Operator. Changed Sensitive Area to YES based on the potential presense of shallow groundwater at 12 feet.	7/17/2015 4:57:05 PM
OGLA	Changed Timberland to Rangeland based on the plant community submitted by Operator	7/17/2015 4:28:41 PM
OGLA	NRCS MAP UNIT DESC not available for "PmB - Platner loam, 1 - 3% slopes" on the Soil Survey.	7/17/2015 1:56:56 PM
OGLA	Added NRCS MAP UNIT DESC for: SnE - Stoneham sandy loam, 5 - 18% slopes SIC2 - Stoneham complex, 1 - 5% slopes, eroded PmA - Platner loam, 0 - 1% slopes	7/17/2015 1:55:37 PM
OGLA	Added: AnC - Ascalon sandy loam, 3 - 5% slopes SnE - Stoneham sandy loam, 5 - 18% slopes SIC2 - Stoneham complex, 1 - 5% slopes, eroded Under SUBMIT TAB	7/17/2015 10:50:22 AM
OGLA	Removed: FtC - Fort loam, 3 - 5% slopes PmC - Platner loam, 3 - 5% slopes  Replaced with: PmB - Platner loam, 1 - 3% slopes PmA - Platner loam, 0 - 1% slopes	7/17/2015 10:31:38 AM
OGLA	Missing Hydrology Map Missing Location Pictures  Received 07/17/2015	7/16/2015 5:50:36 PM
Permit	Operator submitted SUA, which is now attached to this Form 2A. Per operator, "Please note that under sec. 4 of the SUA the landowner has granted permission to bury cuttings."  Changed right to construct to O&G lease and removed surface surety information.	7/10/2015 11:45:50 AM
Permit	Passed completeness.	7/1/2015 8:34:41 AM
Permit	Made the following changes, per operator request: 1) Surface owner has signed the O&G lease; checkbox checked. Per operator: "The right to construct is actually in the O&G lease but we are getting an SUA. Right now, until the SUA is in place we are applying under bond. They have signed the O&G Lease." 2) Changed label on "Other" attachment to "Facility Layout Drawing."	7/1/2015 7:32:00 AM

Total: 16 comment(s)