

FORM  
2A

Rev  
08/19

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:

401825776

Date Received:

11/05/2018

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:

**467075**

Expiration Date:

**08/28/2022**

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: 35080  
 Name: GRAND MESA OPERATING CO  
 Address: 1700 N. WATERFRONT PKWY BL 600  
 City: WICHITA    State: KS    Zip: 67206

Contact Information

Name: MICHAEL REILLY  
 Phone: (316) 265-3000  
 Fax: (316) 265-3455  
 email: MREILLY@GMOCKS.COM

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20020080     Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: DADO    Number: 2-21  
 County: LINCOLN  
 Quarter: NWNE    Section: 21    Township: 7S    Range: 55W    Meridian: 6    Ground Elevation: 5462  
 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: 950 feet FNL from North or South section line  
                                   1387 feet FEL from East or West section line  
 Latitude: 39.429890    Longitude: -103.552920  
 PDOP Reading: 1.6    Date of Measurement: 11/01/2018  
 Instrument Operator's Name: ELIJAH FRANE-FRANE SURVEYING

LOCAL GOVERNMENT INFORMATION

County: LINCOLN    Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County \_\_\_\_\_

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this COGCC application? If the local government has waived its right to precede the COGCC in siting determination, indicate by selecting "NO" here and selecting "Waived" below.  Yes  No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location.

The local government siting permit type is: \_\_\_\_\_

The local government siting permit was filed on: \_\_\_\_\_

The disposition of the application filed with the local government is: \_\_\_\_\_

Additional explanation of local process:

\_\_\_\_\_

**RELATED REMOTE LOCATIONS**

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

<b>This proposed Oil and Gas Location is:</b>	<b>LOCATION ID #</b>	<b>FORM 2A DOC #</b>
Well Site is served by Production Facilities	_____	401826108

**FACILITIES**

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

Wells	1	Oil Tanks*	_____	Condensate Tanks*	_____	Water Tanks*	_____	Buried Produced Water Vaults*	_____
Drilling Pits	1	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	1	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\***

<u>Other Facility Type</u>	<u>Number</u>
_____	_____

\*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:

We will run one 3" poly pipe-pressurized 0-40# PSI and buried at least 4' below the ground surface. Production facilities associated with Form 2A Document #401826108 will be used for the production of the Dado 2-21 well.

\_\_\_\_\_

## CONSTRUCTION

Date planned to commence construction: 09/01/2019 Size of disturbed area during construction in acres: 5.74  
Estimated date that interim reclamation will begin: 02/01/2020 Size of location after interim reclamation in acres: 2.00  
Estimated post-construction ground elevation: 5462

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: No

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:

Evaporation and burial. We will let fluids evaporate and then test the pit to make sure that the levels fall within the 910-1 COGCC tables before closing the pit.

Beneficial reuse or land application plan submitted? No

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

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: PHYLLIS C. THOMPSON

Phone: 1-719-775-2438

Address: C/O TROY THOMPSON

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

Address: 63860 CO RD 27

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

City: LIMON State: CO Zip: 80828

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 11/05/2018

If this Form 2A is associated with Drilling and Spacing Unit applications, list docket number(s): \_\_\_\_\_

## 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:	3305 Feet	_____ Feet
Building Unit:	3505 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	1387 Feet	_____ Feet
Above Ground Utility:	1387 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	950 Feet	_____ Feet
School Facility::	5280 Feet	_____ Feet
School Property Line:	5280 Feet	_____ Feet
Child Care Center:	5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.  
 -For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)?  Yes  No

## 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: WAGES KARVAL - SYMBOL 212 - WELLSITE

NRCS Map Unit Name: \_\_\_\_\_

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: 86 Feet

water well: 2095 Feet

Estimated depth to ground water at Oil and Gas Location 18 Feet

Basis for depth to groundwater and sensitive area determination:

This well is located in a Sensitive area due to it being located in the Arikaree Designated Ground Water Mgmt area and the Northern High Plains Basin. Wtr well Permit #18573 (STOCK).

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: No

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

## 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 There is a surface water area approx 86' West of the proposed well pad, a windmill exists approx 830' Northwest of the well head and a barbed wire fence exists approx 207' East of the well pad. The only improvements that lie within the 500'-1000' buffer area of the wellsite are the barbed wire fence from our wellbore.

GMOC has designed this Location to produce to a remote Location to consolidate production facilities and minimize surface disturbance.

BMP Plan  
Grand Mesa Operating, Co.  
1700 N Waterfront Pkwy, Bldg 600  
Wichita, KS 67206  
P - 316-265-3000 F - 316-265-3455

Certification of Discharge under CDPHE COR-030000  
Storm water discharges associated with construction permit number (Not yet assigned)

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

Signed: \_\_\_\_\_ Date: 11/05/2018 Email: MREILLY@GMOCKS.COM

Print Name: MICHAEL REILLY Title: PRESIDENT

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  \_\_\_\_\_ Director of COGCC Date: 8/29/2019

**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**

	In the event groundwater is encountered, operator shall use an aboveground tank in lieu of the drilling pit.
	Operator shall confirm, through sampling and analysis, that the base of the pit and the cuttings to be buried in place meet the applicable standards of Table 910-1 prior to pit closure in accordance with 900 and 1000 series rules.

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	<p>GMOC will install stormwater controls constructed in accordance with good engineering practices, along the cross- and down-gradient perimeters of the Location to prevent migration of sediment/contaminant into the nearby surface water feature. Prior to construction, perimeter controls will be installed utilizing cuttings from the clearing operations.</p> <p>Once the well pad has been constructed a variety of BMP's shall be utilized for the site specific conditions.</p> <p>BMP's to be utilized may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>-Dirt berms</li> <li>-Erosion control blankets</li> <li>-Straw bale barrier</li> <li>-Straw wattle</li> <li>-Check dams</li> <li>-Culvert/Culvert Protection</li> <li>-Silt Fence</li> <li>-Surface roughening/Surface rip</li> </ul> <p>Storm Water Management Plan (SWMP) is on file in Grand Mesa Operating, Co office. Spill Prevention, Control and Countermeasure Plan is on file in Grand Mesa Operating, Co. office.</p>
2	Material Handling and Spill Prevention	<p>This Location will produce to an offsite production facility. GMOC will construct the production facilities, dedicated to this well Location, within lined secondary containment to prevent the migration of contaminant into the underlying soils and groundwater in the event of a spill.</p>

Total: 2 comment(s)

## Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
901775	SURFACE AGRMT/SURETY
1010720	OBJECTIVE CRITERIA REVIEW MEMO
401825776	FORM 2A SUBMITTED
401825957	OTHER
401825958	ACCESS ROAD MAP
401825959	LOCATION PICTURES
401825962	HYDROLOGY MAP
401825963	LOCATION PICTURES
401825965	LOCATION DRAWING
401825966	REFERENCE AREA MAP
401825967	REFERENCE AREA PICTURES

Total Attach: 11 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Uploaded SUA supplied by operator.  Final Review Completed.	08/26/2019
OGLA-181	The Objective Criteria Review Memo (Doc# 1010720) is attached to this Form 2A. Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	08/14/2019
OGLA-181	COGCC staff conducted its technical review of this Form 2A Oil and Gas Location Assessment within the context of SB 19-181 and the required Objective Criteria. This Form 2A met Objective Criteria #5.c.	08/14/2019
OGLA	<p>Per Operator verification, modified the tank battery language from the pipeline information as this Location will be producing to a remote production facility included in the Related Remote Facility Section.</p> <p>With Operator concurrence:</p> <p>Changed the distance to the nearest surface water feature to 86 feet based on the distance reported on the Hydrology Map submitted by the Operator.</p> <p>Changed the size of disturbance to 5.74 based on the dimensions depicted on the Location Drawing.</p> <p>Removed "Fort Collins - Symbol 124 - Tk Bat site" from the soils list as this information is on the tank battery Form 2A.</p> <p>Removed the NRCS Map Unit Description for the tank battery. Uploaded the NRCS Map Unit Description for the well site.</p> <p>Floodplain determination is based on local consultation, soils review, topography and National Wetland Inventory review.</p> <p>Per Operator request, added the following statement to the Submit Tab: GMOC has designed this Location to produce to a remote Location to consolidate production facilities and minimize surface disturbance.</p> <p>With Operator concurrence, modified the stormwater BMP as follows: Operator shall use stormwater controls constructed in accordance with good engineering practices, along the cross- and down-gradient perimeters of the Location to prevent migration of sediment/contaminant into the nearby surface water feature.</p> <p>With Operator concurrence, added the following BMP: This Location will produce to an offsite production facility. GMOC will construct the production facilities, dedicated to this well Location, within lined secondary containment to prevent the migration of contaminant into the underlying soils and groundwater in the event of a spill.</p>	12/24/2018
Permit	Passed completeness	11/15/2018

Total: 5 comment(s)