

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:

401493373

Date Received:

01/09/2018

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:

454043

Expiration Date:

02/13/2021

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

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20020080 Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: CRATER LAKE Number: 1-8

County: LINCOLN

Quarter: NWNE Section: 8 Township: 8S Range: 54W Meridian: 6 Ground Elevation: 5404

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: 1145 feet FNL from North or South section line

1934 feet FEL from East or West section line

Latitude: 39.371460 Longitude: -103.460740

PDOP Reading: 1.8 Date of Measurement: 12/19/2017

Instrument Operator's Name: ELIJAH FRANE-FRANE SURVEYING INC.

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> </u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u> </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> </u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </u>
Gas or Diesel Motors*	<u> </u>	Electric Motors	<u> </u>	Electric Generators*	<u> </u>	Fuel Tanks*	<u> </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

<input type="text"/>	<input type="text"/>
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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:

CONSTRUCTION

Date planned to commence construction: 02/15/2018 Size of disturbed area during construction in acres: 2.50
Estimated date that interim reclamation will begin: 08/15/2018 Size of location after interim reclamation in acres: 1.00
Estimated post-construction ground elevation: 5404

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: No
Is H₂S 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 test the pit before closing and make sure that the results conform to the 910-1 COGCC table.

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: Ellen Tanner Phone: 303-751-8043

Address: 14300 E. MARINA DR

Fax: _____

Address: _____

Email: _____

City: AURORA State: CO Zip: 80014

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 12/28/2017

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:	2807 Feet	_____ Feet
Building Unit:	3043 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	3353 Feet	_____ Feet
Above Ground Utility:	292 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	1145 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, 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 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: Platner loam - Symbol 172

NRCS Map Unit Name: Kimst Loam - Symbol 144

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: 12/19/2017

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: 554 Feet

water well: 1337 Feet

Estimated depth to ground water at Oil and Gas Location 38 Feet

Basis for depth to groundwater and sensitive area determination:

This well and tank battery are in a sensitive area due to them falling within the Northern High Plains Basin and the Arikaree Designated Ground Water Mgmt Area.

Estimated Depth to Groundwater based on the static water level reported for DWR Permit #121576.

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

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 A barbed wire fence exists approx. 127' South of the proposed well pad and a surface water area exists approx. 262' North of the proposed well pad and 554' from the actual wellbore. A windmill Permit #121576 exists approx. 1252' Northeast of the proposed well pad.
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

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

Signed: _____ Date: 01/09/2018 Email: MREILLY@GMOCKS.COM

Print Name: MICHAEL REILLY Title: PRESIDENT

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: 2/14/2018

Surface Owner Information

Owner Name	Address	Phone	Fax	Email
Ellen Tanner	14300 E. MARINA DR AURORA, CO 80014	303-751-8043		
Everett Ewing	9803 Laredo Dr. Commerce, CO 80113	720-600-1864		

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.

<u>COA Type</u>	<u>Description</u>
	Location lies within proximity of a surface water feature. Operator shall use tertiary containment along the cross- and down-gradient perimeters of the Location.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	<p>Prior to construction, perimeter controls will be installed utilizing cutting 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"> -Dirt berms -Erosion control blankets -Straw bale barrier -Straw wattle -Check dams -Culvert/Culvert Protection -Silt Fence -Surface roughening/Surface rip <p>Drill pits will be filled and reclaimed within 6 months weather permitting. Topsoil will be separated and spread on drill site as final operation.</p> <p>Storm Water Management Plan (SWMP) is on file in Grand Mesa Operating, Co office.</p> <p>Spill Prevention, Control and Countermeasure Plan is on file in Grand Mesa Operating, Co. office.</p>

Total: 1 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401493373	FORM 2A SUBMITTED
401507760	LOCATION DRAWING
401507761	ACCESS ROAD MAP
401507762	HYDROLOGY MAP
401507763	REFERENCE AREA MAP
401507764	LOCATION PICTURES
401507765	LOCATION PICTURES
401507766	REFERENCE AREA PICTURES
401507767	SURFACE AGRMT/SURETY
401507869	OTHER
401507893	NRCS MAP UNIT DESC

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	02/12/2018
Permit	Corrected right to construct to O&G lease.	02/12/2018
OGLA	Moved, "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 to the Submit Tab.	02/02/2018
OGLA	Production Facility will be offset to the southwest, (Attachment Document #401507869). In the event that the well produces, the Operator will submit, into process, Form 2A Document #401539130, for the production facility. Removed the production facilities from the Facilities List. Removed, "We would like to include our tank battery in this permit. If the well is successful we will have a tank battery site 75' off of CR 32 and ' North of the half section line. We will file a Form 4 with our tank battery drawing and location information after the well is successful" from the Facilities Tab. Removed "Well Site" and "Tank Battery" from the Soils List. Changed Estimate Depth to Groundwater to 38 feet based on the static water level reported for DWR Water Well Permit #121576. Added, "Estimated Depth to Groundwater based on the static water level reported for DWR Permit #121576" to the Basis Statement.	02/02/2018
LGD	County Permit # 1723	01/17/2018
Permit	Passed Completeness.	01/12/2018

Total: 6 comment(s)