

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:

TYPE OF WELL OIL GAS COALBED OTHER: _____

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: Goldeneye Fed Well Number: 21-16-6HN

Name of Operator: MALLARD EXPLORATION LLC COGCC Operator Number: 10670

Address: 1400 16TH STREET SUITE 300

City: DENVER State: CO Zip: 80202

Contact Name: Erin Mathews Phone: (720)543 7951 Fax: ()

Email: emathews@mallardexploration.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20170115

WELL LOCATION INFORMATION

QtrQtr: SENW Sec: 21 Twp: 8N Rng: 60W Meridian: 6

Latitude: 40.648590 Longitude: -104.097977

Footage at Surface: 2365 Feet FNL 2256 Feet FWL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 4935 County: WELD

GPS Data:
Date of Measurement: 08/22/2019 PDOP Reading: 1.5 Instrument Operator's Name: Alan Hnizdo

If well is Directional Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone:	FNL/FSL	FEL/FWL	Bottom Hole:	FNL/FSL	FEL/FWL
<u>300</u>	<u>FSL</u>	<u>1220</u>	<u>300</u>	<u>FNL</u>	<u>1075</u>
				<u>FEL</u>	<u>FEL</u>
Sec: <u>21</u>	Twp: <u>8N</u>	Rng: <u>60W</u>	Sec: <u>16</u>	Twp: <u>8N</u>	Rng: <u>60W</u>

LOCAL GOVERNMENT INFORMATION

County: WELD 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 location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition 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: WOGLA

The local government siting permit was filed on: 05/09/2019

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

WOGLA19-0094, approved 8/16/2019, amended to location 1500' SE within same parcel as 1041WOGLA-AMD19-0013, approved November 13, 2019.

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.

(check all that apply)

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 by this Well: Yes

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

NW/4, Sec 21, T8N, R60W

The completed portion of the wellbore does not penetrate the described lease but the lease is within the unit.

Total Acres in Described Lease: 160 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 2917 Feet

Above Ground Utility: 2371 Feet

Railroad: 5280 Feet

Property Line: 271 Feet

School Facility: 5280 Feet

School Property Line: 5280 Feet

Child Care Center: 5280 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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.

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: _____

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 774 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 300 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	535-1272	1280	21 & 16: All

DRILLING PROGRAM

Proposed Total Measured Depth: 17856 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 537 Feet No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	43	0	80	50	80	0
SURF	13+1/2	9+5/8	36	0	1600	550	1600	0
1ST	8+1/2	5+1/2	20	0	17856	2550	17856	1600

Conductor Casing is NOT planned

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)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

- Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number 535-1272
- Rule 603.a.(2) Exception Location (Property Line Setback).

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: Nearest wellbore permitted or completed in the same formation per anti-collision is the proposed Goldeneye Fed 21-16-7HN.
Nearest permitted or existing wellbore belonging to another operator per anti-collision is the Federal 1 (API: 05-123-05527) DA Status.
Vertex Point: 750' FSL, 1075' FEL, Sec 16, 8N, 60W

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 469100

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: _____ Print Name: Justin Garrett

Title: Regulatory Analyst Date: _____ Email: regulatory@ascentgeomatics.c

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____ Director of COGCC Date: _____
 Expiration Date: _____

API NUMBER
05

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>
Drilling/Completion Operations	1) Submit Form 42 online to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Provide cement coverage to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered. Bradenhead Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test.: 1) All: Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) Delayed completion: 6 months after rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed offset well(s). Operator agrees to comply with the DJ Basin Horizontal Offset Policy to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, submit Form 42(s) ("OFFSET MITIGATION COMPLETED") for the mitigated well(s), stating that appropriate mitigation was completed prior to the hydraulic stimulation of this well. Offset wells to mitigate: 05-123-05518, DOTY-FEDERAL 1, PA, Option 3 05-123-05519, FEDERAL 1, DA, Option 3 05-123-05527, FEDERAL 1, DA, Option 3 05-123-07078, DOTY-FEDERAL 1, DA, Option 3 05-123-07357, BUCHER-STATE 1, DA, Option 3 05-123-11180, NILSEN FEDERAL 1, DA, Option 3 05-123-14093, STATE H, DA, Option 3

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	Blowout Prevention Equipment ("BOPE"): A double ram annular preventer will be used during drilling.
2	Drilling/Completion Operations	Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.
3	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad will be logged with an open-hole Resistivity Log and Gamma Ray Log from the kick-off point into the surface casing. All wells on the pad will have a Cement Bond Log with Gamma-Ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

Att Doc Num	Name
402171363	FORM 2 SUBMITTED
402287528	FORM 2 REJECTED
402288426	EXCEPTION LOC REQUEST
402288428	SURFACE AGRMT/SURETY
402288429	DEVIATED DRILLING PLAN
402288430	DIRECTIONAL DATA
402288431	OffsetWellEvaluations Data
402288432	WELL LOCATION PLAT

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit (Rejected)	<p>This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is rejecting this application consistent with the Rejection Process – Form 2 and 2A (May 21, 2019) posted in the Form 2 and Form 2A Instructions section of our website. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is returning this application to the applicant to remedy the deficiencies. The applicant may resubmit this application for COGCC review; upon determination of completeness for any resubmitted application, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary prior to determination of completeness:</p> <ol style="list-style-type: none">1. Missing Rule 318.c Exception location from Rule or Spacing Order request letter attachment.2. Exceptions tab of the form 2 has not been filled out.3. Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease is incorrect.	01/15/2020
Permit	<p>Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease is incorrect.</p> <p>Missing Exception Location Request letter.</p> <p>Exception Location request information not filled out on Exceptions tab.</p>	01/15/2020
Permit	Passed completeness.	12/19/2019
Permit	Returned to draft with operator permission.	11/04/2019
Permit	Location ID missing. Spacing Order Number missing. All required attachments missing: Directional Survey, Directional Data, Well Location Plat, SUA, Offset Well Data. Offset Wells Evaluation tab not filled out.	10/11/2019

Total: 5 comment(s)

Public Comments

No public comments were received on this application during the comment period.

RE-SUBMITTED