FORM 2 Rev 02/20

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: 402362783 **(SUBMITTED)**

Date Received: 04/13/2020

APPLICATION FOR PERMIT TO:

☒ **Drill** ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: ☐ Refiling ☒

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐ Sidetrack ☐

Well Name: Hunt Fed 8-60 Well Number: 19-24-5

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: SENE Sec: 19 Twp: 8N Rng: 60W Meridian: 6

Latitude: 40.650297 Longitude: -104.126860

Footage at Surface: 1724 Feet FNL/FSL FNL 490 Feet FEL/FWL FEL

Field Name: DJ HORIZONTAL NIOBRARA Field Number: 16950

Ground Elevation: 4933 County: WELD

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP Date of Measurement: 03/24/2020

Instrument Operator's Name: Allen Shaffett

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	
	2515	FNL	300	FEL		2515	FNL	300	FWL
Sec:	19	Twp:	8N	Rng:	60W	Sec:	24	Twp:	8N	Rng:	61W

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: 1041 WOGLA

The local government siting permit was filed on: 05/19/2020

The disposition of the application filed with the local government is: In Process

Additional explanation of local process:

1041WOGLA20-0026 submitted 5/19/2020, approved 7/9/2020

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: (check all that apply)
- ☐ is the mineral owner beneath the location.
- ☐ 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.)

NE/4, Sec 19, T8N. R60W

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:	3566	Feet
Above Ground Utility:	5280	Feet
Railroad:	5280	Feet
Property Line:	490	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

- 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.

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:

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: 486 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

Spacing Unit also contains Federal Minerals: COC 077277, COC 071627

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	535-1298	1280	19,24: All

DRILLING PROGRAM

Proposed Total Measured Depth: 16781 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: 652 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H_2S 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	100	50	100	0
SURF	13+1/2	9+5/8	36	0	1850	650	1850	0
1ST	8+1/2	5+1/2	20	0	16781	1860	16781	

☐ 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 _____

☐ 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

SUBMITTED

This Form 2 is being submitted as a refile of API 05-123-46711.

The Hunt Fed 8-60 19-24-9 (API: 05-123-46712), Hunt Fed 8-60 19-24-10 (API: 05-123-46710), Hunt Fed 8-60 19-24-11 (API: 05-123-46709), Hunt Fed 8-60 19-24-12 (API: 05-123-46716) are being abandoned from this location.

The remaining Hunt Fed 8-60 19-24-1 (API: 05-123-46713), Hunt Fed 8-60 19-24-2 (API: 05-123-46714), Hunt Fed 8-60 19-24-3 (API: 05-123-46707), Hunt Fed 8-60 19-24-4 (API: 05-123-46715), Hunt Fed 8-60 19-24-5 (API: 05-123-46711), Hunt Fed 8-60 19-24-6 (API: 05-123-46705), Hunt Fed 8-60 19-24-7 (API: 05-123-46708), and Hunt Fed 8-60 19-24-8 (API: 05-123-46706) are being refiled with unchanged SHL, TPZ, and BHL in accordance with the setbacks of approved spading order 535-1298.

The well site has not been constructed. There have been no new buildings constructed and no changes to the surrounding land use, Surface & Minerals, Right to Construct, mineral lease description, or Objective Formations. All previously submitted notices, Surface Use Agreements, and letters are also still valid. This location is not in a buffer or exception zone, so no notices are required under Rule 305.
Surface Use Agreement Doc #401410024 is already in COGIS.

The Local Government Information and Cultural Distances have been updated.

The nearest well in information has been updated to reflect the respaced laterals.

Nearest well in unit per anti-collision is the Hunt Fed 8-60 19-24-6.

Nearest outside operated well per anti-collision is the Hunt 8-60 17A-20-C1 (API: 05-123-48034) PR Status.

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

Location ID: 454749

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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: 4/13/2020 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

05 123 46711 00

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.

COA Type	Description

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)

Attachment Check List

Att Doc Num	Name
402364676	DEVIATED DRILLING PLAN
402364677	WELL LOCATION PLAT
402364678	DIRECTIONAL DATA
402402496	OffsetWellEvaluations Data

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Permit	Date of measurement does not match Well Location Plat. Return to draft.	07/15/2020
Permit	WOGLA not approved. Return to draft.	04/14/2020

Total: 2 comment(s)

SUBMITTED

Public Comments

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

SUBMITTED