

**APPLICATION FOR PERMIT TO:**

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

TYPE OF WELL    OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER: <u>Amend existing APD</u>	Refiling <input checked="" type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:  
 08/13/2019

Well Name: <u>Anderson Fed</u>	Well Number: <u>6-5-6HN</u>
Name of Operator: <u>MALLARD EXPLORATION LLC</u>	COGCC Operator Number: <u>10670</u>
Address: <u>1400 16TH STREET SUITE 300</u>	
City: <u>DENVER</u> State: <u>CO</u>	Zip: <u>80202</u>
Contact Name: <u>Erin Mathews</u>	Phone: <u>(720)543 7951</u> Fax: (    )
Email: <u>emathews@mallardexploration.com</u>	

**RECLAMATION FINANCIAL ASSURANCE**  
 Plugging and Abandonment Bond Surety ID: 20170115

**WELL LOCATION INFORMATION**

QtrQtr: SESW      Sec: 31      Twp: 9N      Rng: 59W      Meridian: 6

Latitude: 40.700912      Longitude: -104.023427

Footage at Surface:	<u>602</u>	Feet	FNL/FSL	<u>1910</u>	Feet	FEL/FWL
	<u>602</u>		<u>FSL</u>	<u>1910</u>		<u>FWL</u>

Field Name: WILDCAT      Field Number: 99999

Ground Elevation: 4878      County: WELD

GPS Data:  
 Date of Measurement: 01/17/2018    PDOP Reading: 1.5    Instrument Operator's Name: Dominick Davis

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>2350</u>	<u>FSL</u>	<u>600</u>	<u>2350</u>	<u>FSL</u>	<u>300</u>
<u>2350</u>	<u>FSL</u>	<u>600</u>	<u>2350</u>	<u>FSL</u>	<u>300</u>
Sec: <u>6</u>	Twp: <u>8N</u>	Rng: <u>59W</u>	Sec: <u>5</u>	Twp: <u>8N</u>	Rng: <u>58W</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 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: WOGLA

The local government siting permit was filed on: 04/15/2019

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

Additional explanation of local process:

Weld Co LGD waived right to precede 5/29/19. WOGLA Approved 6/6/19.

**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: No

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.)

S2NE, South 50' of N2NE, SENW, West 50' and South 50' of NENW, Sec 6, T8N, R59W

Total Acres in Described Lease: 123 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: 5280 Feet  
Above Ground Utility: 660 Feet  
Railroad: 5280 Feet  
Property Line: 685 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: 447 FeetDistance 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**

A spacing order will be submitted for the following unit. A docket # will be provided on the priority list per guidance from COGCC.

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	535-1242	1280	Sec. 6 & 5: All

**DRILLING PROGRAM**Proposed Total Measured Depth: 17495 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: 406 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S Drilling Operations Plan)Will salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP 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 DisposalCuttings 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	1525	525	1525	0
1ST	8+1/2	5+1/2	20	0	17495	2575	17495	

 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    Nearest wellbore in proposed unit per anti-collision is the AF 2.

The nearest permitted or existing wellbore belonging to another operator per anti-collision is the M S White - Government 1 (API: 05-123-05591) DA Status.

This amendment is part of a larger effort to consolidate and use surface locations and existing well permits in the area more efficiently and effectively.

The well name will change from Anderson Fed 8-59-6-2124CE to Anderson Fed 6-5-6HN.

The well will be moving from Pad Name Anderson Pad 9-59-31-SESW (Loc ID 447824) to Anderson Facility 9-59-31-SESW Pad (Loc ID 447898).

The objective formation will not change.

The TMD, casing/cement, HOP Evaluation, and BMP have been reviewed and updated.

A revised spacing order application will be submitted for the September hearing and the docket number will be provided once received.

The TPZ and BHL setbacks and intra-well distances will be compliant with the revised spacing order.

Cultural distances to Building, Building Unit, High Occupancy Building Unit, DOAA, School Facility, School Property Line, and Child Care Center distances are unchanged at >5,280'.

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

Location ID:          447898      

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:       8/13/2019          Email:       regulatory@ascentgeomatics.c



## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
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.
4	Drilling/Completion Operations	Bradenhead Monitoring: Operator acknowledges and will comply with COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.

Total: 4 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](http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf)

### Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
402106546	FORM 2 SUBMITTED
402142780	WELL LOCATION PLAT
402142783	DEVIATED DRILLING PLAN
402142784	DIRECTIONAL DATA
402142975	OffsetWellEvaluations Data
402202213	OFFSET WELL EVALUATION

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	09/30/2019
Permit	Passed Permitting.	09/30/2019
Permit	The Form 2A for this location (Doc #402106531) was approved on September 14, 2019. An Objective Criteria review was conducted for the Form 2A and an Objective Criteria Review Memo (Doc #2479135) was placed on the Form 2A. No additional OGLA review or Objective Criteria review is needed for this Form 2 APD.	09/30/2019
Permit	The Objective Criteria Review Memo (Doc# 2479135) is attached to the Form 2A associated with this APD. 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.	09/30/2019
Permit	With operator concurrence, the Spacing Order Number 535-1242 was added.	09/30/2019
Engineer	Option 3 for 05-123-14371, FEDERAL G 4-8 may be problematic. 2002 plugging included casing cut at 1009', 50 sks at 1115'-700', 40 sks at 523'-400' across shoe at 463'.	09/12/2019
Permit	Returned to draft - Incorrect Well Location Plat attachment. Passed Completeness.	08/15/2019

Total: 7 comment(s)