

FORM  
2

Rev  
05/22

## State of Colorado

### Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

403567874

**(SUBMITTED)**

Date Received:

10/20/2023

#### APPLICATION FOR PERMIT TO

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

Amend ☒

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_

Refill ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: Bunker 8

Well Number: 6H

Name of Operator: MAGPIE OPERATING INC

COGCC Operator Number: 52530

Address: 2707 SOUTH COUNTY RD 11

City: LOVELAND

State: CO

Zip: 80537

Contact Name: Jody Kost

Phone: (719)429-1434

Fax: ( )

Email: magpieoil2@yahoo.com

#### FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

##### COGCC Financial Assurance

☒ The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20210007

##### Federal Financial Assurance

☐ In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ \_\_\_\_\_

#### WELL LOCATION INFORMATION

##### Surface Location

QtrQtr: NWSW Sec: 29 Twp: 5N Rng: 68W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 2110 Feet FSL 2275 Feet FWL

Latitude: 40.369650

Longitude: -105.032010

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP

Date of Measurement: 09/10/2018

Ground Elevation: 4985

Field Name: LOVELAND

Field Number: 52000

Well Plan: is ☐ Directional ☒ Horizontal (highly deviated) ☐ Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

##### Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 29 Twp: 5N Rng: 68W

Footage at TPZ: 1347 FNL 2557 FWL

Measured Depth of TPZ: 6174

True Vertical Depth of TPZ: 4974 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 30 Twp: 5N Rng: 68WFootage at BPZ: 1025 FNL 677 FWLMeasured Depth of BPZ: 13365True Vertical Depth of BPZ: 4802 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 30 Twp: 5N Rng: 68WFootage at BHL: 1025 FNL 677 FWLFNL/FSLFEL/FWL**LOCAL GOVERNMENT PERMITTING INFORMATION**County: LARIMERMunicipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of §

24-65.1-108 C.R.S.? No

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when "applying for a permit to drill," operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? ☐ 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 disposition of the application filed with the Relevant Local Government is: Waived Date of Final Disposition: 10/21/2019Comments: Larimer County, at the time of initial submittal of the 2A, did not regulate siting. They enacted rules during the processing of the 2A. They have chosen to waive siting for this location. A letter attesting to their waiving of regulating the Bunker 8 location is attached.**SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATION**Surface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ IndianMineral Owner beneath this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☒ Indian

Surface Owner Protection Bond (if applicable): \_\_\_\_\_

Surety ID Number (if applicable): \_\_\_\_\_

**MINERALS DEVELOPED BY WELL**

The ownership of all the minerals that will be developed by this Well is (check all that apply):

☒ Fee☐ State☐ Federal☐ Indian☐ N/A

## LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

\* If this Well is within a unit, describe a lease that will be developed by the Well.

\* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

T5N R68W: Sec 29: SW4; Sec 31: N2NE; and Sec 32: NW4

Total Acres in Described Lease: 400

Described Mineral Lease is: ☒ Fee

☐ State

☐ Federal

☐ Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1923 Feet  
Building Unit: 1923 Feet  
Public Road: 2244 Feet  
Above Ground Utility: 2228 Feet  
Railroad: 5280 Feet  
Property Line: 348 Feet

### INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

## OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL	384-3	2896	4N-68W Sec 5: W/2NE/4, NW/4, N/2SW/4, NW/4SE/4; Sec 6: N/2, 4N-69W Sec 1: E/2NE/4, 5N-68W Sec 19: S/2; Sec 20: W/2SW/4, S/2S/2, NW/4SE/4, S/2S/2, N/2SE/4, SE/4SW/4, S/2SE/4; Sec 29-32: All, 5N-69W Sec 25: Small parcel in E/2E/2SE/4

Federal or State Unit Name (if appl):

Unit Number:

## SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 677 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 843 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: Feet

## Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers.

## SPACING & FORMATIONS COMMENTS

## DRILLING PROGRAM

Proposed Total Measured Depth: 13365 Feet

TVD at Proposed Total Measured Depth 4802 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: 791 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? No

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

## CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	A2452	36	0	240	120	240	0
SURF	13+1/2	9+5/8	J55	36	0	1650	766	1650	0
S.C. 1.1	8+1/2	4+1/2	J55	13.5	0	4660	901	4660	0
S.C. 1.2	8+1/2	4+1/2	J55	13.5	4660	13365	1503	13365	4660

☐ Conductor Casing is NOT planned

## POTENTIAL FLOW AND CONFINING FORMATIONS

Zone Type	Formation /Hazard	Top M.D.	Top T.V.D.	Bottom M.D.	Bottom T.V.D.	TDS (mg/L)	Data Source	Comment
Groundwater	Laramie/Fox Hills	0	0	410	410	1001-10000	Groundwater Sample	Aquifer review on DWR showed no data for this area; TDS and depths are from Groundwater sampling sites on ECMC.
Confining Layer	Pierre Shale	410	410	1050	1064			
Hydrocarbon	Sussex	1910	1744	2500	2189			
Hydrocarbon	Shannon	2500	2189	5625	4689			
Confining Layer	Sharon Springs	5625	4689	5685	4709			
Hydrocarbon	Niobrara	5685	4709	660	5024			
Hydrocarbon	Codell	6600	5024	13365	4802			Btm MD=TD, Btm TVD=TVD @ BHL, since well is drilled with inclination > 90 deg

## OPERATOR COMMENTS AND SUBMITTAL

Comments 

This Form 2 is submitted to modify the directional plan, casing/cementing, and target formation. The offset well evaluation has also been updated.

This application is in a Comprehensive Area Plan \_\_\_\_\_ CAP #: \_\_\_\_\_

Oil and Gas Development Plan Name \_\_\_\_\_

OGDP ID#: \_\_\_\_\_

Location ID: 307209

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

Signed: \_\_\_\_\_

Print Name: Jessica Donahue

Title: Compliance Specialist

Date: 10/20/2023

Email: jdonahue@ardorenvironmental.

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**

05 069 06539 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**

0 COA

**Best Management Practices****No BMP/COA Type****Description****Attachment List****Att Doc Num****Name**

403568144	DEVIATED DRILLING PLAN
403568145	WELL LOCATION PLAT
403568146	DIRECTIONAL DATA
403568157	OffsetWellEvaluations Data
403568189	WAIVERS

Total Attach: 5 Files

**General Comments****User Group****Comment****Comment Date**

		Stamp Upon Approval
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Total: 0 comment(s)