

FORM
2

Rev
05/22

State of Colorado

Energy & Carbon Management Commission

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Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

403567820

(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: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Bunker 8 Well Number: 5H
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): 20210006

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: NESW Sec: 29 Twp: 5N Rng: 68W Meridian: 6

Footage at Surface: 2080 Feet FSL 2275 Feet FWL

Latitude: 40.365600 Longitude: -105.032010

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP Date of Measurement: 09/10/2018

Ground Elevation: 4989

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: 583 FSL 1574 FEL
Measured Depth of TPZ: 6607 True Vertical Depth of TPZ: 5024 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 20 Twp: 5N Rng: 68W Footage at BPZ: 670 FSL 2074 FWL

Measured Depth of BPZ: 12239 True Vertical Depth of BPZ: 5024 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 20 Twp: 5N Rng: 68W Footage at BHL: 670 FSL 2074 FWL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: LARIMER Municipality: 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: 10/21/2019

Comments: 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 Indian

Mineral 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: 1952 Feet
Building Unit: 1901 Feet
Public Road: 2079 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	3280	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: 647 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: 350 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: 12239 Feet TVD at Proposed Total Measured Depth 5024 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: 108 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 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	5026	972	5026	0
S.C. 1.2	8+1/2	4+1/2	J55	13.5	5026	12239	1236	12239	5026

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	1000	1000	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	Parkman	1000	1000	1880	1754			
Hydrocarbon	Sussex	1880	1754	2350	2139			
Hydrocarbon	Shannon	2350	2139	5470	4664			
Confining Layer	Sharon Springs	5470	4664	5495	4684			
Hydrocarbon	Niobrara	5495	4684	5980	4999			
Hydrocarbon	Codell	5980	4999	12239	5024			Btm MD=TD, Btm TVD=TVD @ BHL, since well is drilled with inclination > 90 deg

OPERATOR COMMENTS AND SUBMITTAL

Comments _____

This application is in a Comprehensive Area Plan No CAP #: _____
 Oil and Gas Development Plan Name _____ OGDP ID#: _____

