

FORM
2
Rev
08/16

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:
401515069

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL GAS COALBED OTHER _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Date Received:
02/12/2018

Well Name: Bunker Well Number: 3A-1H
Name of Operator: MAGPIE OPERATING, INC COGCC Operator Number: 52530
Address: 2707 SOUTH COUNTY RD 11
City: LOVELAND State: CO Zip: 80537
Contact Name: Ryan Warner Phone: (970)669 6308 Fax: (970)669 6396
Email: magpieoil@yahoo.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20180063

WELL LOCATION INFORMATION

QtrQtr: SENW Sec: 32 Twp: 5N Rng: 68W Meridian: 6
Latitude: 40.357961 Longitude: -105.034328

Footage at Surface: 2151 Feet ^{FNL/FSL} FNL 1652 Feet ^{FEL/FWL} FWL

Field Name: LOVELAND Field Number: 52000

Ground Elevation: 5053 County: LARIMER

GPS Data:

Date of Measurement: 09/14/2017 PDOP Reading: 1.3 Instrument Operator's Name: Ian Carabajal

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

Footage at Top of Prod Zone: ^{FNL/FSL} 1430 FNL 2017 FWL ^{FEL/FWL} Bottom Hole: 1430 FNL 2036 FEL
Sec: 32 Twp: 5N Rng: 68W Sec: 31 Twp: 5N Rng: 68W

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: applicant is owner

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.)

SW, Sec 29; N/2NE, Sec 31; NW, Sec 32, T5N, R68W

Total Acres in Described Lease: 400 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: 1470 Feet

Building Unit: 1636 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1672 Feet

Above Ground Utility: 1675 Feet

Railroad: 5280 Feet

Property Line: 517 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, and Designated Outside Activity Area - 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: 463 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 614 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

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

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	384-3	3280	Sec. 1,5,19 & 25

DRILLING PROGRAM

Proposed Total Measured Depth: 9424 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: 569 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 318A

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	36	30	0	0	40	120	40	0
SURF	12+1/4	9+5/8	36	0	1500	725	1500	0
1ST	8+1/2	5+1/2	17	0	9424	2450	9424	0

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 317.p

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 formation from anti-collision survey is the Inhen 1-A (API:05-069-06089).
Nearest permitted or existing wellbore belonging to another operator is the Bunker 4 (API:05-069-05296) PA Status per anti-collision.
Magpie self waives the Exception Location.

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

Location ID: 333081

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: 2/12/2018 Email: regulatory@ascentgeomatics.c

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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

COGCC Approved:  Director of COGCC Date: 5/21/2018

Expiration Date: 05/20/2020

API NUMBER 05 069 06500 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.

<u>COA Type</u>	<u>Description</u>
	<p>Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test:</p> <ol style="list-style-type: none">1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation.2) 6 months after rig release, prior to stimulation (delayed completions).3) Within 30 days of first production, as reported on Form 5A.
	<ol style="list-style-type: none">1) Note surface casing setting depth change from 650' to 1500'. Increase cement coverage accordingly.2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU 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.3) Comply with Rule 317.i and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
	<p>Operator acknowledges the proximity of the listed wells. Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, or adequately demonstrate isolation is present, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>API #069-06119, IHNEN 3;</p>
	<p>Operator acknowledges the proximity of the listed non-operated wells. Operator assures that this offset list will be remediated per the DJ Basin Horizontal Offset Policy (option 3) and ensure all applicable documentation is submitted. Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>API # 069-05299, SWANSON 2;</p>

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed well path with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottom hole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment.
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	Operator acknowledges and will comply with COGCC policy for Bradenhead Monitoring during Hydraulic Fracturing treatments in the Greater Wattenberg Area dated May 29, 2012.
4	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with Cased-hole Pulsed Neutron with Gamma Ray Log from kick off point into the surface casing. All wells will have a Cement Bond Log with Gamma Ray on production casing into the surface. The horizontal portion of the well may be logged with a logging-while-drilling log. Proper notification will be provided on the Form 5 Completion report in the event that wells are logged in the horizontal section, or statement indicating that no open-hole logs were run.

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

Attachment Check List

Att Doc Num	Name
1696914	OPEN HOLE LOGGING EXCEPTION
401515069	FORM 2 SUBMITTED
401516042	OffsetWellEvaluations Data
401516072	DIRECTIONAL DATA
401516089	WELL LOCATION PLAT
401516558	DEVIATED DRILLING PLAN
401543205	EXCEPTION LOC REQUEST
401647218	OFFSET WELL EVALUATION

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Added the surety ID # 2018-0063. Final Review Completed.	05/17/2018
Permit	Operator requested Exception to Open Hole Logging Rule 317.p. See attached. With operators concurrence changed Right to Construct to applicant. Attached corrected Open Hole Logging Exception. Permitting Review Complete.	03/16/2018
Permit	ON HOLD: w/o meeting with operator.	02/26/2018
Permit	Passed Completeness. Review spacing comments & "Casing" tab during technical review.	02/21/2018

Total: 4 comment(s)