

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: _____ ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Refiling <input type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:
09/08/2018

Well Name: Freeman 8-62 Well Number: 13-24-2

Name of Operator: BISON OIL & GAS II LLC COGCC Operator Number: 10661

Address: 518 17TH STREET #1800

City: DENVER State: CO Zip: 80202

Contact Name: Abigail Wenk Phone: (720)644-6997 Fax: ()

Email: awenk@bisonog.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20190035

WELL LOCATION INFORMATION

QtrQtr: NWNE Sec: 13 Twp: 8N Rng: 62W Meridian: 6

Latitude: 40.667291 Longitude: -104.267086

Footage at Surface: <u>560</u> Feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>2435</u> Feet	<u>FNL</u>	<u>FEL</u>

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 5003 County: WELD

GPS Data:
Date of Measurement: 08/20/2018 PDOP Reading: 1.5 Instrument Operator's Name: Jared Christopher

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

Footage at Top of Prod Zone: <u>650</u> Feet	FNL/FSL	FEL/FWL	Bottom Hole: <u>300</u> Feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>1600</u> Feet	<u>FNL</u>	<u>FWL</u>	<u>FSL</u> <u>1600</u> Feet	<u>FSL</u>	<u>FWL</u>

Sec: 13 Twp: 8N Rng: 62W Sec: 24 Twp: 8N Rng: 62W

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: WOGLA

The local government siting permit was filed on: 08/02/2019

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

Additional explanation of local process:

WOGLA 19-0190 was approved on 10/30/2019

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: 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.)

Township 8 North, Range 62 West, 6th P.M
Section 22: N2, S2
Section 24: SE

Township 9 North, Range 62 West
Section 11: ALL

Total Acres in Described Lease: 1440 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: 2999 Feet
Building Unit: 2999 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 551 Feet
Above Ground Utility: 2758 Feet
Railroad: 5280 Feet
Property Line: 560 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: 263 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 600 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

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.)
CODELL	CODL	535-1133	1280	13: ALL, 24: ALL

DRILLING PROGRAM

Proposed Total Measured Depth: 17031 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: 457 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 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	17031	1860	17031	4000

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 permitted or completed in the same formation is the Freeman 8-62 13-24-1 (Bison Oil & Gas II, LLC), as measured using 3D manual calculations.

Nearest existing or permitted wellbore belonging to another operator is the Khaki Campbell 25-6HN API 05-123-47738 (Mallard Exploration LLC), using 2D measurements.

The wellbore does not cross lease described but the lease is within the DSU.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 469713

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: Abigail Wenk

Title: Regulatory Manager Date: 9/8/2018 Email: awenk@bisonog.com

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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved:  Director of COGCC Date: 12/18/2019

Expiration Date: 12/17/2021

API NUMBER 05 123 50664 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>
Drilling/Completion Operations	Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test.: 1) Within 60 days of rig release, prior to stimulation. 2) 6 months after rig release, prior to stimulation. 3) Within 30 days of first production, as reported on Form 5A.
Drilling/Completion Operations	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 48 hour spud notice for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j and provide cement coverage from the end of production casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all aquifers are covered.
Drilling/Completion Operations	Operator acknowledges the proximity of the listed non-producing well(s). Operator agrees to provide mitigation Option 3 (per the DJ Basin Horizontal Offset Policy, ensure all applicable documentation is submitted , and submit Form 42(s) "OFFSET MITIGATION COMPLETED" for the remediated well(s), referencing the API Number of the proposed horizontal wells stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of the proposed wells. Freeman 1 (API NO 123-07087)Wise 1 (API NO 123-05538) Husky Et Al West 8-24 (API NO 123-08167)West 11-24 (API NO 123-25585)
Drilling/Completion Operations	Operator acknowledges the proximity of the following non-operated listed wells: Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. Dunn 1-13H (API NO 123-34697)

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	If a skid is performed for the subject well, then the only required BOPE tests are for the BOPE connection bonnet seal breaks, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 30 days during the pad operations.
2	Drilling/Completion Operations	Alternative Logging Program - One of the first wells drilled on the pad will be logged with Open Hole Resistivity Log and Gamma Ray Log from the kick-off point to 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 (by API#, well name & number) the well in which open-hole logs were run.
3	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.

Total: 3 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

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment Check List

Att Doc Num	Name
401749004	FORM 2 SUBMITTED
401749007	SURFACE AGRMT/SURETY
401749008	WELL LOCATION PLAT
401752416	DEVIATED DRILLING PLAN
401752417	DIRECTIONAL DATA
401757347	OffsetWellEvaluations Data
402267193	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	12/18/2019
Permit	-Passed Permit Review	12/18/2019
Permit	COGCC conducted the technical review for the related Oil and Gas Location Assessment permit, Form 2A document #401748156 under the statutory authority provided through SB 19-181, including the Objective Criteria. The Director approved the Form 2A on 12/12/2019, establishing Location ID #469713 subject to conditions included in the permit. The well proposed by this related Form 2 was contemplated during COGCC's review of the Form 2A. The Objective Criteria Review Memo (Doc# 1347732) and Objective Criteria Review Update (Doc# 1347798) can be found in the document file for this Location.	12/17/2019
Permit	-Received consent from the operator to add/ change the following: 1. Updated the plugging bond ID 2. Added the spacing order number from the docket number 3. Updated the open hole logging BMP 4. Removed the drilling the beyond the setback comments since they're not needed.	12/17/2019
Permit	-The wellbore does not cross lease described but the lease is within DSU. -Changed the commingle tab to no since zone type is single zone -Added the location ID number from the approved 2A -COGCC Staff has added the Local Government siting permit information and the School and Childcare Center distances provided by the operator. -Waiting on the operator's response about the following: 1.Updating the plugging bond ID to the current one 2.Adding the spacing order number from the docket number 3.Updating the open hole logging BMP 4.Removing the drilling the beyond the setback comments since they're not needed.	12/16/2019
Engineer	Offset Wells Evaluated	02/04/2019
Permit	Passed Completeness	09/19/2018

Total: 7 comment(s)