

**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 checked="" type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received:

Well Name: Hale Fed 8-60      Well Number: 22-23-10  
 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)6446997      Fax: ( )  
 Email: awenk@bisonog.com

**RECLAMATION FINANCIAL ASSURANCE**  
 Plugging and Abandonment Bond Surety ID: 20170074

**WELL LOCATION INFORMATION**

QtrQtr: SWNW      Sec: 22      Twp: 8N      Rng: 60W      Meridian: 6  
 Latitude: 40.649179      Longitude: -104.084992

Footage at Surface:      2160      Feet      FNL/FSL      FNL      560      Feet      FEL/FWL      FWL

Field Name: WILDCAT      Field Number: 99999  
 Ground Elevation: 4931      County: WELD

GPS Data:  
 Date of Measurement: 12/20/2018      PDOP Reading: 1.3      Instrument Operator's Name: GREG WEIMER

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>1205</u>	<u>FSL</u>	<u>300</u>	<u>1211</u>	<u>FSL</u>	<u>2450</u>
		<u>FWL</u>			<u>FWL</u>
Sec: <u>22</u>	Twp: <u>8N</u>	Rng: <u>60W</u>	Sec: <u>23</u>	Twp: <u>8N</u>	Rng: <u>60W</u>

**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 60 West, 6th PM  
Section 22: E/2  
Section 23: SW/4

Total Acres in Described Lease: 480 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: 541 Feet  
Above Ground Utility: 5280 Feet  
Railroad: 5280 Feet  
Property Line: 480 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: 416 Feet

Distance 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

The BHL footage FWL of Section 23 depicted on the well location plat is less than the required 300' from unit boundary per Spacing Order (Docket No. 190100160 JAN Hearing). Operator will not be completing the well past 2350' FWL of Sec. 23.

## 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		960	22:ALL, 23:W/2

## DRILLING PROGRAM

Proposed Total Measured Depth: 14642 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: 540 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 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	14642	1860	14642	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

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 1211' FSL and 2350' FWL of Section 23. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

Nearest wellbore permitted or completed in the same formation is the Hale 8-60 22-23-11 (Bison Oil & Gas II, LLC), as measured using 2D manual calculations.

Nearest existing or permitted wellbore belonging to another operator is the STANLEY #14-23 API 05-123-10707 (CARRIZO NIOBRARA LLC), measured using 2D manual calculations.

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

Location ID: 453379

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: Ariana Solis

Title: Regulatory Analyst Date: \_\_\_\_\_ Email: asolis@bisonog.com

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: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

**API NUMBER**  
05 123 46061 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

<u>COA Type</u>	<u>Description</u>

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	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.
2	Drilling/Completion Operations	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 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 "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run.

Total: 2 comment(s)

## Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
401912056	DIRECTIONAL DATA
401912059	DEVIATED DRILLING PLAN
401912060	WELL LOCATION PLAT
401912061	SURFACE AGRMT/SURETY
401912070	OffsetWellEvaluations Data

Total Attach: 5 Files

## General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
		Stamp Upon Approval

Total: 0 comment(s)

## **Public Comments**

No public comments were received on this application during the comment period.