

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL <input type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER <u>Intercept Well</u>	Refiling <input type="checkbox"/>
ZONE TYPE SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:
11/28/2017

Well Name: De Ford Well Number: 1 Intercept

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: 20170074

WELL LOCATION INFORMATION

QtrQtr: NESE Sec: 19 Twp: 8N Rng: 59W Meridian: 6

Latitude: 40.646958 Longitude: -104.014002

Footage at Surface: <u>2339</u> Feet	FNL/FSL	FEL/FWL
<u>FSL</u> <u>980</u> Feet	<u>FEL</u>	

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 4833 County: WELD

GPS Data:
Date of Measurement: 11/27/2017 PDOP Reading: 1.2 Instrument Operator's Name: Chad Meiers

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>2338</u> <u>FSL</u> <u>971</u> <u>FEL</u>	<u>2338</u> <u>FSL</u> <u>971</u> <u>FEL</u>		
Sec: <u>19</u> Twp: <u>8N</u> Rng: <u>59W</u>	Sec: <u>19</u> Twp: <u>8N</u> Rng: <u>59W</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: No

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.)

This well will not produce any minerals as it is an intercept well utilized solely for the purpose of plugging the De Ford 1.

Total Acres in Described Lease: _____ 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: _____ 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: 1899 Feet
- Above Ground Utility: 2419 Feet
- Railroad: 5280 Feet
- Property Line: 325 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: _____ Feet

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

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

SPACING & FORMATIONS COMMENTS

This well will not produce any minerals as it is an intercept well utilized solely for the purpose of plugging the De Ford 1.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)

DRILLING PROGRAM

Proposed Total Measured Depth: 6919 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: 0 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
SURF	20	8+5/8	24	0	150	0	150	0
OPEN HOLE	7+7/8			250	6919			

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 To comply with the Condition of Approval listed on the Castor 8-59 19-24-12 Well API 05-123-45842, on November 17, 2017, Bison Oil & Gas II, LLC (Bison) moved a rig to the De Ford #1 API 05-123-05533, a well previously drilled and abandoned in 1955, to re-enter and properly isolate the Codell, Niobrara, and fresh water zones. Due to multiple issues that are described in the attached Expedited Approval Request, Bison is proposing to intersect the De Ford #1 below the surface casing and cement (approximately 250' TVD) from this new well drilled 10' west of the De Ford #1. Bison plans to use this re-entry as a method to properly isolate the Codell, Niobrara, and fresh water zones prior to hydraulically fracturing the horizontal well within 1500' of the De Ford #1. After intersecting the De Ford #1, Bison will washdown to the Codell and set cement plugs as originally proposed on the submitted and approved Form 6. Bison has been in constant communication with the COGCC throughout this process and has received permission to move forward with our proposed plan.

Attached please find the Rule 303.I.(2) Expedited Approval Request as well as the email correspondence with the LGD waiving the comment period. For Surface Owner waiver, please see page five of the attached Surface Use Agreement.

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

Location ID: _____

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: Consulting Regulatory Ana Date: 11/28/2017 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 and applicable orders and is hereby approved.

COGCC Approved: *Matthew Lee* Director of COGCC Date: 11/30/2017

Expiration Date: 11/29/2019

API NUMBER
05 123 45962 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>

Best Management Practices

No BMP/COA Type

Description

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Applicable Policies and Notices to Operators

Policy
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
2473158	DEVIATED DRILLING PLAN
2473159	CORRESPONDENCE
401466790	FORM 2 SUBMITTED
401469997	SURFACE AGRMT/SURETY
401470003	PROPOSED PLUGGING PROCEDURE
401470005	WELL LOCATION PLAT
401470006	WELLBORE DIAGRAM
401470008	CORRESPONDENCE
401470010	DIRECTIONAL DATA
401470121	EXPEDITED APPROVAL REQUEST

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	11/30/2017
Permit	With Operator concurrence, unchecked boxes for "surface owner is mineral owner, is committed, and has signed". No minerals will be developed by this well.	11/30/2017
Permit	Operator acknowledges discrepancies in lat/longs on page 1 and page 3 of the attached Deviated Drilling Plan as clerical errors made by the Directional Company who supplied the document. Operator confirms the recently surveyed lat/longs shown on the attached Well Location Plat are correct and match the lat/longs reported on this APD. Operator acknowledges the discrepancy between the BHLs on the attached Well Location Plat. Operator confirms the BHL footage should be 2338' FSL, as shown on the full plat diagram; the BHL footage shown in the close-up Detail A is incorrect and should be disregarded.	11/29/2017
Engineer	The lat-longs given in the Deviated Drilling Plan are not the same as in the Plat. On the Deviated Plan "Site: Existing Wells" lat-longs are for the 05-123-33378, Peterson PC LG 19-06 located in the SENW 19-8N-59W. The "Well: DeFord Intersection" is close but not exactly the same as given on the Plat for the 05-123-05533, De Ford #1. Also the Target BHL on the Plat - Detail A is 2352 FSL versus 2338 FSL on the Plat.	11/29/2017
Permit	Attached Deviated Drilling Plan and added open hole data to Casing tab as provided by Operator. LGD and Public Comment periods have been waived by COGCC staff. Expedited approval request has been approved by COGCC Director. Permitting review complete.	11/29/2017
Permit	Operator has requested issuance of this application-to-drill with limited notice per Rule 303.i.(2) Exigent Circumstances. While attempting to comply with a COA on the Castor 8-59 19-24-12 (05-123-45842), Operator was unable to properly re-enter and plug the De Ford 1 (05-123-05533) due to mechanical difficulty related to a blockage in the wellbore. This proposed well will be drilled solely as an intercept well to plug the De Ford 1. COGCC Director's approval of Operator's Request for Expedited Approval is attached as "Correspondence".	11/29/2017
Permit	Additional Casing data is required to show total proposed depth of 6919'. This will be addressed during COGCC Engineering review. Passed completeness.	11/29/2017
Permit	With Operator concurrence: - Changed Zone Type from Single Zone to N/A as this well will not produce. - Added footage calls to Top of Producing Zone (TPZ) data fields. - Changed right to construct from N/A to SUA. - Added comment in Lease Information box, "This well will not produce any minerals as it is an intercept well utilized solely for the purpose of plugging the De Ford 1." - Added comment in Spacing box, "This well will not produce any minerals as it is an intercept well utilized solely for the purpose of plugging the De Ford 1." - Added distance to nearest nonop well as 0'.	11/29/2017

Total: 8 comment(s)