

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:
402394901

APPLICATION FOR PERMIT TO:

☒ **Drill** ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

Date Received:
05/12/2020

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

Refiling ☒
Sidetrack ☐

Well Name: Wade 8-59 Well Number: 20A-29-32-1
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: 20190035

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 20 Twp: 8N Rng: 59W Meridian: 6
Latitude: 40.641721 Longitude: -104.008838
Footage at Surface: 460 Feet FNL/FSL FSL 479 Feet FEL/FWL FWL
Field Name: WILDCAT Field Number: 99999
Ground Elevation: 4871 County: WELD
GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 10/31/2017
Instrument Operator's Name: JAMES FRESHWATER
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
300 FNL 350 FWL 200 FSL 350 FWL
Sec: 29 Twp: 8N Rng: 59W Sec: 32 Twp: 8N Rng: 59W

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: 05/01/2019

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

Additional explanation of local process:

WOGLA19-0084 was approved 6/21/2019.

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: 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.)

Township 8 North, Range 59W, 6th P.M.
Section 32: S2N2

Total Acres in Described Lease: 160 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: | <u>4958</u> Feet |
| Building Unit: | <u>4958</u> Feet |
| High Occupancy Building Unit: | <u>5280</u> Feet |
| Designated Outside Activity Area: | <u>5280</u> Feet |
| Public Road: | <u>1397</u> Feet |
| Above Ground Utility: | <u>448</u> Feet |
| Railroad: | <u>5280</u> Feet |
| Property Line: | <u>460</u> Feet |
| School Facility: | <u>5280</u> Feet |
| School Property Line: | <u>5280</u> Feet |
| Child Care Center: | <u>5280</u> 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: 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

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 300' FSL and 350' FWL of Section 32.

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.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| NIOBRARA | NBRR | 535-1305 | 1280 | 29:ALL, 32:ALL |

DRILLING PROGRAM

Proposed Total Measured Depth: 16539 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: 1090 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 | 80 | 40 | 80 | 0 |
| SURF | 13+1/2 | 9+5/8 | 36 | 0 | 1850 | 650 | 1850 | 0 |
| 1ST | 8+1/2 | 5+1/2 | 20 | 0 | 16539 | 1860 | 16539 | 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 refiled APD is being submitted to update the following:
SHL, TPZ, & BHL
Plugging Bond
Add Local Government Siting Information
Add Distances to Schools & Child Care Facilities
Drilling & Spacing Unit Setbacks
Casing Program
Offset Well Evaluation Data

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 300' FSL and 350' FWL of Section 32. 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 Wade 8-59 20A-29-32-2 (Bison Oil & Gas II, LLC), as measured using 2D manual calculations.

Nearest existing or permitted wellbore belonging to another operator is the McCourt #1, API 05-123-09181 (DIXEL RESOURCES INC), measured using 2D manual calculations.

No wells owned by other operators are Producing, Temporarily Abandoned, or Shut-In within 150' of this wells productive lateral, therefore stimulation setback consent is not needed.

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

Location ID: 455825

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: 5/12/2020 Email: asolis@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: 9/10/2020

Expiration Date: 09/09/2022

API NUMBER

05 123 47273 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 | <p>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) 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.</p> <p>2) Comply with Rule 317.j. and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log.</p> <p>3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.</p> <p>4) The Operator will abide by the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area, May 29, 2012.</p> |
| Drilling/Completion Operations | <p>Bradenhead Testing</p> <p>Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test:</p> <p>1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation.</p> <p>2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation.</p> <p>3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.</p> |
| Drilling/Completion Operations | <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). 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>DAVID F BRYSON 1 (API 05-123-05495)</p> <p>A RUPP 1-32 (API 05-123-10632)</p> <p>CARVER 1 (API 05-123-13370)</p> <p>DEFORD 1 (API 05-123-14507)</p> <p>CASTOR-MALO 15-20 (API 05-123-19718)</p> <p>GREEN 5-3 (API 05-123-20102)</p> |
| Drilling/Completion Operations | <p>Operator acknowledges the proximity of the listed non-operated wells. Operator assures this offset list will be remediated per the DJ Basin Horizontal Offset Policy (Option 4). Operator will submit a Form 42 ("OTHER- AS SPECIFIED BY PERMIT CONDITION") stating that appropriate mitigation will be completed, during the hydraulic stimulation of this well. Bradenhead to remain open and monitored during all fracs. Be prepared to react to an increase in pressure or flow, which may include suspending frac treatments, until offset well bradenhead pressure has been mitigated. Notify COGCC via Form 42 - Notice of High Bradenhead Pressure During Stimulation.</p> <p>Wade 02-29 (API 05-123-19932)</p> |
| Drilling/Completion Operations | <p>Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.</p> |
| Construction | <p>If location is not constructed by 2A expiration (7/7/2021), a refile Form 2A must be approved prior to location construction.</p> |

Best Management Practices

| No | BMP/COA Type | Description |
|-----------|--------------------------------|---|
| 1 | 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 measuredwhile-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 openhole 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 openhole logs were run." |
| 2 | Drilling/Completion Operations | When a skid is performed, if a previous well on that pad has completed a full BOPE test within the past 21 days, then the only required BOPE tests are for the BOPE connections that were broken during the skid. The purpose of this is to prevent the wear and tear on the choke line and kill line valves. The annular and double rams will be tested as per usual and all broken connections will also be tested (annular to 70% of rated pressure, all other valves and connections will be tested to full rated pressure). Under no circumstances will 21 days be exceeded without completing a full BOPE test to all connections including all choke and kill line valves. Daily function test / activation of pipe rams are still required in addition to a preventer operator test on each trip. |
| 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 |
|--------------------|----------------------------|
| 402394901 | FORM 2 SUBMITTED |
| 402394925 | DIRECTIONAL DATA |
| 402394943 | OffsetWellEvaluations Data |
| 402394954 | DEVIATED DRILLING PLAN |
| 402394955 | WELL LOCATION PLAT |
| 402485907 | OFFSET WELL EVALUATION |

Total Attach: 6 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Final Review Completed. | 09/02/2020 |
| Permit | Passed Permit Review | 09/01/2020 |
| Permit | Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, and welfare and the environment, including wildlife resources set by SB 19-181. The Objective Criteria Review Memo (Doc# 1347952) can be found in the document file for Location ID 455825. | 09/01/2020 |
| OGLA | Received requested information from operator on 8/3/2020. COGCC review will resume and be conducted within 60 days (by 10/2/2020). | 08/14/2020 |
| OGLA | <p>This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is placing this form on HOLD until additional information is received from the applicant.</p> <p>In compliance with § 24-65.1-108(1), C.R.S., the COGCC is providing a written request for all additional information necessary for a final determination to be made on this application. The applicant may provide all requested additional information to COGCC via email. Upon receipt of all requested information, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review. If the applicant no longer requires this application be approved, the applicant may request to withdraw the application.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary for the Director to make a final determination:</p> <ol style="list-style-type: none"> 1. Provide a copy of the Surface Use Agreement Bison O&G II has entered into with the surface owner listed on the Form 2A (Wade Castor) on Parcel 053920000008 for the construction of the Wade 8-59 20A and Melody Joan 8-59 20B locations. 2. Provide an explanation of the technical feasibility of how the current two location development is congruent with rules 1002.d. and 1002.e. to minimize land disturbance. | 07/24/2020 |
| Engineer | <ul style="list-style-type: none"> • Surface casing check complete • Offset well review complete • 317.r - No wells • 317.s - No wells • Engineering review complete | 07/20/2020 |
| Permit | <p>-Received consent from the operator to add/ change the following:</p> <ol style="list-style-type: none"> 1.Updated the spacing order to most recent one (535-1305) 2.Added the drilling beyond the setback COA 3.Added the unbuilt location COA | 07/15/2020 |
| Permit | <p>-Changed the commingle tab to no since the zone type is single zone</p> <p>-Waiting on the operator's response about the following:</p> <ol style="list-style-type: none"> 1.Updating the spacing order to the current one (535-1305) 2.Adding the drilling beyond the setback COA 3.Adding the unbuilt location COA | 07/06/2020 |
| Permit | Passed completeness. | 05/29/2020 |

Total: 9 comment(s)