

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:

401204345

Date Received:

02/09/2017

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: BHR FED

Well Number: O23-14-397-4RH

Name of Operator: AUGUSTUS ENERGY PARTNERS II LLC

COGCC Operator Number: 10591

Address: 2016 GRAND AVENUE SUITE A

City: BILLINGS State: MT Zip: 59102

Contact Name: Duane Zimmerman

Phone: (406)294-5990

Fax: (406)294-5992

Email: dzimmerman@augustusenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20150098

WELL LOCATION INFORMATION

QtrQtr: SWSE Sec: 23 Twp: 3N Rng: 97W Meridian: 6

Latitude: 40.209653

Longitude: -108.241040

Footage at Surface: 901 Feet FNL/FSL FSL 1391 Feet FEL/FWL FEL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 6023

County: RIO BLANCO

GPS Data:

Date of Measurement: 01/20/2017 PDOP Reading: 1.3 Instrument Operator's Name: K. Stewart

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

Footage at Top of Prod Zone: FNL/FSL FSL 600 FSL 2310 FEL 600 FNL 2310 FEL
Sec: 23 Twp: 3N Rng: 97W Sec: 14 Twp: 3N Rng: 97W

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: oil and gas lease

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.)

The lease below the SHL is:

Sec. 22, T3N, R97W: E/2SW/4, SE/4
Sec. 23, T3N, R97W: NW/4SW/4, S/2S/2
Sec. 24, T3N, R97W: SW/4
Sec. 26, T3N, R97W: NE/4NE/4, SW/4

The completed wellbore crosses under the lease line. The lease described is part of a larger federal unit that will be produced by this well.

Total Acres in Described Lease: 800 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: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 3103 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: 1000 Feet

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

Federal or State Unit Name (if appl): Wiley Unit Number: COC75390X

SPACING & FORMATIONS COMMENTS

Nearest unit boundary is the eastern section line of Section 24, 3N, 97W

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 | | | |

DRILLING PROGRAM

Proposed Total Measured Depth: 20678 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: _____ 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: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Augustus intends to use a closed-loop drilling system. Drilling fluids may be disposed at an offsite commercial facility.

Beneficial reuse or land application plan submitted? No

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 | 20 | 104.13 | 0 | 80 | | | |
| SURF | 12+1/4 | 9+5/8 | 36 | 0 | 3300 | 599 | 3300 | 0 |
| 1ST | 8+3/4 | 7 | 26 | 0 | 10010 | 572 | 10010 | 0 |
| 1ST LINER | 6+1/8 | 4+1/2 | 15.1 | 9810 | 20678 | 568 | 20678 | 9810 |

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

Location ID: 430926

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: Bradley Baum

Title: Project Manager II Date: 2/9/2017 Email: bbaum@kleinfelder.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:  Director of COGCC Date: 5/24/2017

Expiration Date: 05/23/2019

API NUMBER

05 103 12289 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

| | |
|--|--|
| | If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016, revised October 6, 2016). |
| | Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017). |
| | 1)Operator shall comply with the most current revision of the Northwest Notification Policy. 2)Operator shall provide cement coverage from the intermediate casing shoe (7" FIRST STRING) to a minimum of 200' above the surface casing shoe to provide isolation of all Cretaceous (including Mesaverde Group) oil, gas, and water-bearing sandstone and coalbed formations that are not otherwise covered by surface casing. Verify intermediate casing cement coverage with a cement bond log. |

Best Management Practices

No BMP/COA Type

Description

| | | |
|---|--------------------------------|---|
| 1 | Drilling/Completion Operations | The first well drilled on the O23 Pad has been logged with an open-hole resistivity log with gamma-ray from TD into the surface casing. The Well being used for the open-hole resistivity log with gamma ray is the Wiley 23-3-97-1 (API 103-11954), Doc 2226680. All subsequent wells on the pad will have a cement bond log with gamma-ray run on the production casing (or intermediate casing if production liner is run). All wells on the pad will have the horizontal portion of the wellbore logged with, at minimum, measured-while-drilling log with gamma-ray. |
|---|--------------------------------|---|

Total: 1 comment(s)

Applicable Policies and Notices to Operators

| |
|--|
| Policy |
| NW Colorado Notification Policy. http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf |
| Notice Concerning Operating Requirements for Wildlife Protection. http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf |

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|----------------------------|
| 401204345 | FORM 2 SUBMITTED |
| 401204823 | WELL LOCATION PLAT |
| 401205294 | DEVIATED DRILLING PLAN |
| 401207001 | OffsetWellEvaluations Data |
| 401214102 | DIRECTIONAL DATA |
| 401292259 | OFFSET WELL EVALUATION |

Total Attach: 6 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|---------------------|
| Permit | Corrected operator comment in the Spacing & Formations section to say section 24 instead of Sec 23, with operator approval. Removed "and cuttings" from the operator comments in the Drilling & Waste Management section to agree with 5/16/17 comment with D. Zimmerman regarding cuttings going to a commercial facility. Operator agreed to correction. Added to Logging BMP that the Well being used for the open-hole resistivity log with gamma ray is the Wiley 23-3-97-1 (API 103-11954), Doc #2226680. Final review complete. | 05/24/2017 |
| OGLA | Phone conversation with operator, D. Zimmerman, on 5/15/17 regarding cuttings disposal plans. Operator plans to dispose all cuttings at a commercial facility - a cuttings trench is not planned. Drilling Waste Management Program changed with operator concurrence - Cuttings Disposal to Offsite, Cuttings Disposal Method to Commercial Disposal. | 05/16/2017 |
| Permit | Added task review for OGLA to review waste management program. | 04/27/2017 |
| Permit | This is a new well on an existing pad. Waste management program is the same as the form 2A that expires in 8/24/2018. Preliminary review complete. | 03/17/2017 |
| Engineer | Offset water well check: COGCC evaluated offset water wells within one mile of this proposed well's surface hole location. This information was used in addition to locally-available geophysical logs and hydrogeologic information to evaluate the adequacy of the operator's proposed surface casing setting depth. The deepest water well within one mile is 300 feet. COGCC's geologic map indicates the Wasatch Formation is at the surface at this location. Proposed surface casing setting depth of 3300 feet will not provide full coverage of the Mesaverde Group based on Operator's geologic prognosis. Minimum cement coverage requirements are specified in Condition of Approval #2. Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. Removed duplicate entry of well Wiley 23-3-97 H1 from offset well evaluation spreadsheet. 5/8/2017: revised casing plan per operator. 5/10/2017: additional minor casing plan changes per operator | 02/27/2017 |
| Permit | Passed completeness. | 02/21/2017 |
| Permit | Returned to Draft: * Type of well needs to be selected. * Double check northing/easting on Directional drilling import. * Need Logging Statement on Operator BMP/COA Tab. * Remove Multi-Well Plan attachment as it is not needed. | 02/17/2017 |

Total: 7 comment(s)