

FORM
2

Rev
05/22

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:

403341807

(SUBMITTED)

Date Received:

06/15/2023

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: State Seventy Holes Well Number: U-Y-10HNXRL
 Name of Operator: BONANZA CREEK ENERGY OPERATING COMPANY LLC COGCC Operator Number: 8960
 Address: 410 17TH STREET SUITE #1400
 City: DENVER State: CO Zip: 80202
 Contact Name: Jeff Annable Phone: (303)312-8529 Fax: ()
 Email: jannable@civiresources.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

The Operator has provided or will provide Financial Assurance to the COGCC for this Well.

Surety ID Number (if applicable): 20120018

Federal Financial Assurance

In checking this box, the Operator certifies that it has provided or will provide at least this amount of Financial Assurance to the federal government for this Well. (Per Rule702.a.)

Amount of Federal Financial Assurance \$ _____

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NWNE Sec: 3 Twp: 4N Rng: 62W Meridian: 6

Footage at Surface: 288 Feet FNL 2284 Feet FEL

Latitude: 40.348200 Longitude: -104.311000

GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 05/20/2022

Ground Elevation: 4549

Field Name: WATTENBERG Field Number: 90750

Well Plan: is Directional Horizontal (highly deviated) Vertical

If Well plan is Directional or Horizontal attach Deviated Drilling Plan and Directional Data.

Subsurface Locations

Top of Productive Zone (TPZ)

Sec: 3 Twp: 4N Rng: 62W Footage at TPZ: 330 FNL 10 FEL
Measured Depth of TPZ: 6841 True Vertical Depth of TPZ: 6040 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)
 Sec: 10 Twp: 4N Rng: 62W Footage at BPZ: 330 FSL 10 FEL
 Measured Depth of BPZ: 16866 True Vertical Depth of BPZ: 6040 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)
 Sec: 10 Twp: 4N Rng: 62W Footage at BHL: 330 FSL 10 FEL
 FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELD Municipality: N/A

Is the Surface Location of this Well in an area designated as one of State interest and subject to the requirements of § 24-65.1-108 C.R.S.? Yes

Per § 34-60-106(1)(f)(I)(A) C.R.S., the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas Location.

SB 19-181 provides that when “applying for a permit to drill,” operators must include proof that they sought a local government siting permit and the disposition of that permit application, or that the local government does not have siting regulations. § 34-60-106(1)(f)(I)(A) C.R.S.

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this Location? 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 disposition of the application filed with the Relevant Local Government is: Other Date of Final Disposition: 09/11/2013

Comments: This location was permitted when oil and gas activities were a Use by Right for AG zoned properties in Unincorporated Weld County. Guidance received from Weld County staff states a new 1041 WOGLA is only required for existing Use by Right locations if new wells are being added or the location is changed substantially from what was permitted. Since we are not adding wells or changing the location a new Weld County 1041 WOGLA is not required. Therefore, the original Form 2A approval date will be used for the local permit approval date.

SURFACE AND MINERAL OWNERSHIP AT WELL’S OIL & GAS LOCATION

Surface Owner of the land at this Well’s Oil and Gas Location: Fee State Federal Indian

Mineral Owner beneath this Well’s Oil and Gas Location: Fee State Federal Indian

Surface Owner Protection Bond (if applicable): _____ Surety ID Number (if applicable): _____

MINERALS DEVELOPED BY WELL

The ownership of all the minerals that will be developed by this Well is (check all that apply):

- Fee
- State
- Federal
- Indian
- N/A

LEASE INFORMATION

Using standard QtrQtr, Section, Township, Range format describe one entire mineral lease as follows:

* If this Well is within a unit, describe a lease that will be developed by the Well.

* If this Well is not subject to a unit, describe the lease that will be produced by the Well.

(Attach a Lease Map or Lease Description or Lease if necessary.)

Township 4 North Range 62 West
Section 3: NE4, S2

Total Acres in Described Lease: 480 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # OG-106632

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet
Building Unit: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 5280 Feet
Railroad: 5280 Feet
Property Line: 288 Feet

INSTRUCTIONS:

- Specify all distances per Rule 308.b.(1).
- 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 – as defined in 100 Series Rules.

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 | 407-3466 | 640 | T4N R62W SEC 2: W2W2, SEC 3: E2E2, SEC 10: E2E2, SEC 11: W2W2 |

Federal or State Unit Name (if appl): _____

Unit Number: _____

Enter 5280 for distance greater than 1 mile.

SUBSURFACE MINERAL SETBACKS

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 330 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 0 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

Exception Location

If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

SPACING & FORMATIONS COMMENTS

DRILLING PROGRAM

Proposed Total Measured Depth: 16866 Feet TVD at Proposed Total Measured Depth 6040 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: 8 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 Plan unless a plan was already submitted with the Form 2A per Rule 304.c.(10).

Will there be hydraulic fracture treatment at a depth less than 2,000 feet in this well? No

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

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Grade | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 24 | 16 | N/A | 42 | 0 | 80 | 100 | 80 | 0 |
| SURF | 12+1/4 | 9+5/8 | J-55 | 36 | 0 | 1500 | 400 | 1500 | 0 |
| 1ST | 8+1/2 | 5+1/2 | P-110 | 20 | 0 | 16866 | 2239 | 16866 | 1500 |

Conductor Casing is NOT planned

POTENTIAL FLOW AND CONFINING FORMATIONS

| Zone Type | Formation /Hazard | Top M.D. | Top T.V.D. | Bottom M.D. | Bottom T.V.D. | TDS (mg/L) | Data Source | Comment |
|-------------------|----------------------|----------|------------|-------------|---------------|------------|--------------------------|---|
| Groundwater | Laramie-Fox Hills | 109 | 109 | 225 | 225 | 0-500 | Groundwater Atlas | USGS HA-650 (Robson et al, 1981) |
| Confining Layer | Pierre Formation | 225 | 225 | 365 | 365 | | | |
| Groundwater | Upper Pierre | 365 | 365 | 1398 | 1355 | 501-1000 | Electric Log Calculation | Seventy Holes 23-5 (05-123 -35671-0000) |
| Confining Layer | Base of Upper Pierre | 1398 | 1355 | 3561 | 3335 | | | |
| Hydrocarbon | Parkman Sandstone | 3561 | 3335 | 3824 | 3575 | | | Not productive in this area |
| Confining Layer | Pierre Formation | 3824 | 3575 | 4075 | 3805 | | | |
| Hydrocarbon | Sussex Sandstone | 4075 | 3805 | 4151 | 3875 | | | Not productive in this area |
| Confining Layer | Pierre Formation | 4151 | 3875 | 5025 | 4675 | | | |
| Hydrocarbon | Shannon Sandstone | 5025 | 4675 | 5167 | 4805 | | | Not productive in this area |
| Confining Layer | Pierre Formation | 5167 | 4805 | 6473 | 5935 | | | |
| Subsurface Hazard | Sharon Springs | 6473 | 5935 | 6841 | 6040 | | | Sloughing Shales |
| Hydrocarbon | Niobrara | 6841 | 6040 | 16866 | 6040 | | | |

OPERATOR COMMENTS AND SUBMITTAL

Comments

The distance to the completed portion of the nearest well in the same unit on the "Spacing & Formations" tab is 0' since this is the only well within the drilling and spacing unit.

The nearest existing or proposed wellbore belonging to another operator is the Anschutz Fed 4-62-11-0108C, API #05-123-46841. The proposed completed interval is greater than 150' from the completed portion of this offset wellbore, therefore a stimulation setback consent is not required. This distance was measured in 3-dimensional space.

The producing intervals of all offset wells owned by other operators within 150' of this well are greater than 150' from the proposed completed interval of this well, therefore a stimulation setback consent is not required.

Attached as OTHER, is the anti-collision analysis which factors in three dimensional measurements as well as gyro surveys performed on some of the offset wellbores. All measurements to offset wellbores were derived from this analysis.

This application is in a Comprehensive Area Plan _____ CAP #: _____

Oil and Gas Development Plan Name _____ OGDP ID#: _____

Location ID: 434100

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Jeff Annable

Title: Manager, Regulatory Date: 6/15/2023 Email: jannable@civiresources.com

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: _____

Expiration Date: _____

API NUMBER

05

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

0 COA

Best Management Practices

| No | BMP/COA Type | Description |
|-----------|--------------------------------|---|
| 1 | Drilling/Completion Operations | One of the first wells drilled on the pad during the first rig occupation will be logged with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for one of the stratigraphically deepest wells on the pad. 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 will state "Alternative Logging Program - No open-hole logs were run" and will clearly identify the type of log and the well (by API#) in which open-hole logs were run. |
| 2 | 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: 2 comment(s)

Attachment List

| Att Doc Num | Name |
|--------------------|----------------------------|
| 403343666 | SURFACE AGRMT/SURETY |
| 403343805 | OffsetWellEvaluations Data |
| 403357585 | WELL LOCATION PLAT |
| 403357586 | OTHER |
| 403357588 | DEVIATED DRILLING PLAN |
| 403357589 | DIRECTIONAL DATA |

Total Attach: 6 Files

General Comments

| User Group | Comment | Comment Date |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)