

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:

403133811

Date Received:

08/23/2022

## 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: Buford Well Number: 33-10-2L  
Name of Operator: CONFLUENCE DJ LLC COGCC Operator Number: 10518  
Address: 1125 17TH STREET #1550  
City: DENVER State: CO Zip: 80202  
Contact Name: Brittany Rothe Phone: (303)226-9519 Fax: ( )  
Email: brothe@confluencelp.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): 20160056

### 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: SWSW Sec: 33 Twp: 1N Rng: 65W Meridian: 6

Footage at Surface: 910 Feet FNL 300 Feet FWL  
FNL/FSL FEL/FWL

Latitude: 40.003030 Longitude: -104.677340

GPS Data: GPS Quality Value: 1.2 Type of GPS Quality Value: PDOP Date of Measurement: 05/03/2017

Ground Elevation: 5077

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: 33 Twp: 1N Rng: 65W Footage at TPZ: 360 FSL 240 FWL  
Measured Depth of TPZ: 8236 True Vertical Depth of TPZ: 7276 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 28 Twp: 1N Rng: 65W Footage at BPZ: 360 FNL 240 FWL
Measured Depth of BPZ: 17688 True Vertical Depth of BPZ: 7276 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 28 Twp: 1N Rng: 65W Footage at BHL: 360 FNL 240 FWL
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? [X] Yes [ ] No

[X] 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: Approved Date of Final Disposition: 10/03/2017

Comments: The WOGLA was approved on October 3, 2017.

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

Surface Owner of the land at this Well's Oil and Gas Location: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner beneath this Well's Oil and Gas Location: [X] 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):

- [X] 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.)

T1N R65W Section 33: All

Total Acres in Described Lease: 640 Described Mineral Lease is: [X] Fee [ ] State [ ] Federal [ ] Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1756 Feet  
Building Unit: 2026 Feet  
Public Road: 874 Feet  
Above Ground Utility: 366 Feet  
Railroad: 5280 Feet  
Property Line: 300 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           | 407-3339                | 640                           | T1N-R65W Sec 28: W/2, Sec 33: W/2    |

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SUBSURFACE MINERAL SETBACKS

Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 240 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: 240 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: 17688 Feet TVD at Proposed Total Measured Depth 7276 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: 706 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs 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? NoWill salt sections be encountered during drilling? NoWill salt based (>15,000 ppm Cl) drilling fluids be used? NoWill oil based drilling fluids be used? YesBOP Equipment Type:  Annular Preventor  Double Ram  Rotating Head  None

Beneficial reuse or land application plan submitted? \_\_\_\_\_

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

**CASING PROGRAM**

| <u>Casing Type</u> | <u>Size of Hole</u> | <u>Size of Casing</u> | <u>Grade</u> | <u>Wt/Ft</u> | <u>Csg/Liner Top</u> | <u>Setting Depth</u> | <u>Sacks Cmt</u> | <u>Cmt Btm</u> | <u>Cmt Top</u> |
|--------------------|---------------------|-----------------------|--------------|--------------|----------------------|----------------------|------------------|----------------|----------------|
| CONDUCTOR          | 26                  | 16                    | A52A         | 43           | 0                    | 80                   | 400              | 80             | 0              |
| SURF               | 13+1/2              | 9+5/8                 | J55          | 36           | 0                    | 2350                 | 1098             | 2350           | 0              |
| 1ST                | 8+1/2               | 5+1/2                 | P110         | 20           | 0                    | 17688                | 1929             | 17688          |                |

 Conductor Casing is NOT planned**POTENTIAL FLOW AND CONFINING FORMATIONS**

| <u>Zone Type</u>  | <u>Formation /Hazard</u> | <u>Top M.D.</u> | <u>Top T.V.D.</u> | <u>Bottom M.D.</u> | <u>Bottom T.V.D.</u> | <u>TDS (mg/L)</u> | <u>Data Source</u> | <u>Comment</u>   |
|-------------------|--------------------------|-----------------|-------------------|--------------------|----------------------|-------------------|--------------------|--|
| Groundwater       | Upper Arapahoe           | 0               | 0                 | 304                | 304                  | 501-1000          | DWR                |  |
| Groundwater       | Lower Arapahoe           | 304             | 304               | 662                | 662                  | 501-1000          | DWR                |  |
| Groundwater       | Laramie-Fox Hills        | 662             | 662               | 1267               | 1267                 | 501-1000          | USGS               | Top & bottom depth from DWR                                    |
| Groundwater       | Upper Pierre             | 1267            | 1267              | 2236               | 2201                 | 1001-10000        | Other              | COGCC: Upper Pierre Aquifer Water Quality Study, Project #2141 |
| Confining Layer   | Pierre Shale             | 2236            | 2201              | 4745               | 4655                 |                   |                    |  |
| Hydrocarbon       | Sussex                   | 4745            | 4655              | 4961               | 4867                 |                   |                    |  |
| Confining Layer   | Pierre Shale             | 4961            | 4867              | 5838               | 5725                 |                   |                    |  |
| Hydrocarbon       | Shannon                  | 5838            | 5725              | 6049               | 5931                 |                   |                    |  |
| Confining Layer   | Pierre Shale             | 6049            | 5931              | 7279               | 7084                 |                   |                    |  |
| Subsurface Hazard | Sharon Springs           | 7279            | 7084              | 7295               | 7095                 |                   |                    |  |
| Hydrocarbon       | Niobrara                 | 7295            | 7095              | 8236               | 7276                 |                   |                    |  |

**OPERATOR COMMENTS AND SUBMITTAL**

Comments



## 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.

### Condition of Approval

| <u>COA Type</u>                | <u>Description</u>  |
|--------------------------------|---|
| Interim Reclamation            | Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).  |
| Construction                   | If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).   |
| Drilling/Completion Operations | 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:<br>1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation.<br>2) If a delayed completion, a second test is required between 6-9 months after rig release and must be conducted prior to stimulation. If any pressure greater than 200 psi is observed or if there is continuous flow, Operator must contact COGCC engineering for approval prior to stimulation.<br>3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance. |
| Drilling/Completion Operations | Operator acknowledges the proximity of the listed non-operated well. Operator assures that this offset well will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document Operator using 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. 123-08629KILKER #1  |
| Drilling/Completion Operations | Operator acknowledges the proximity of the non-operated listed well. Operator agrees to: provide mitigation option 1 or 2 (per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well. 123-10497STRAWDER #1  |
| Drilling/Completion Operations | 1) Submit Form 42 electronically to COGCC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 2 business day spud notice via Form 42 for all subsequent wells drilled on the pad.<br>2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara and from 500' below Sussex to 500' above Sussex. Verify coverage with a cement bond log.  |
| 6 COAs                         |   |

## 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 | Alternative Logging Program: The Buford 33-9-3L (API No. 05-123-45544-00) well drilled on the pad was logged with an 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 "Alternative Logging Program - No open-hole logs were run. The Buford 33-9-3L (API No. 05-123-45544-00) is the well in which open-hole logs were run." |

Total: 2 comment(s)

## Attachment List

| <b>Att Doc Num</b> | <b>Name</b>                |
|--------------------|----------------------------|
| 403133811          | FORM 2 SUBMITTED           |
| 403137141          | WELL LOCATION PLAT         |
| 403137143          | DEVIATED DRILLING PLAN     |
| 403137146          | DIRECTIONAL DATA           |
| 403142266          | OffsetWellEvaluations Data |
| 403180182          | OFFSET WELL EVALUATION     |

Total Attach: 6 Files

## General Comments

| <b>User Group</b> | <b>Comment</b>  | <b>Comment Date</b> |
|-------------------|---|---------------------|
| Permit            | Final Review Completed.   | 09/14/2022          |
| OGLA              | The Location and its associated Form 2A materials was fully reviewed during the review of this APD. This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed. | 09/02/2022          |

Total: 2 comment(s)