

FORM  
2

Rev  
12/20

## 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:

402861434

Date Received:

02/17/2022

#### APPLICATION FOR PERMIT TO:

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

Amend ☐

Refile ☒

Sidetrack ☐

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: \_\_\_\_\_

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Well Name: Flaherty Well Number: 13-5-3  
Name of Operator: CONFLUENCE DJ LLC COGCC Operator Number: 10518  
Address: 1001 17TH STREET #1250  
City: DENVER State: CO Zip: 80202  
Contact Name: Brittany Rothe Phone: (303)226-9519 Fax: ( )  
Email: brothe@confluencelp.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20160056

#### WELL LOCATION INFORMATION

##### Surface Location

QtrQtr: SESW Sec: 18 Twp: 4N Rng: 62W Meridian: 6  
Footage at Surface: 491 Feet FSL 1633 Feet FWL  
Latitude: 40.306530 Longitude: -104.370700  
GPS Data: GPS Quality Value: 1.9 Type of GPS Quality Value: PDOP Date of Measurement: 03/03/2020  
Ground Elevation: 4563  
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: 13 Twp: 4N Rng: 63W Footage at TPZ: 1636 FNL 470 FEL  
Measured Depth of TPZ: 7773 True Vertical Depth of TPZ: 6386 FNL/FSL FEL/FWL

###### Base of Productive Zone (BPZ)

Sec: 13 Twp: 4N Rng: 63W Footage at BPZ: 1637 FNL 470 FWL  
Measured Depth of BPZ: 12174 True Vertical Depth of BPZ: 6386 FNL/FSL FEL/FWL

###### Bottom Hole Location (BHL)

Sec: 13 Twp: 4N Rng: 63W Footage at BHL: 1637 FNL 470 FWL  
FNL/FSL FEL/FWL

#### LOCAL GOVERNMENT PERMITTING INFORMATION

County: WELDMunicipality: 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: Approved Date of Final Disposition: 07/20/2018

Comments: The WOGLA was approved on July 20, 2018.

## 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 Financial Assurance (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.)

T4N R63W Sec. 13: All

Total Acres in Described Lease: 640 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # \_\_\_\_\_

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 2506 Feet  
Building Unit: 3996 Feet  
Public Road: 732 Feet  
Above Ground Utility: 670 Feet  
Railroad: 5280 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.

Property Line: 491 Feet

## 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	407-2372	640	T4N R63W Sec. 13: All

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: 470 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: 302 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: 12174 Feet

TVD at Proposed Total Measured Depth 6386 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: 708 Feet ☐ No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No If yes, attach an H<sub>2</sub>S 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**

<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	J-55	36	0	1650	674	1650	0
1ST	8+1/2	5+1/2	P110	20	0	12174	1112	12174	

☐ 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	Laramie-Fox Hills	0	0	250	250	501-1000	USGS	Top & bottom depth from DWR
Groundwater	Upper Pierre	250	250	1552	1507	1001-10000	Other	COGCC: Upper Pierre Aquifer Water Quality Study, Project 2141
Confining Layer	Pierre Shale	1552	1507	4471	3938			
Hydrocarbon	Sussex	4471	3938	4750	4168			
Confining Layer	Pierre Shale	4750	4168	5307	4629			
Hydrocarbon	Shannon	5307	4629	5428	4729			
Confining Layer	Pierre Shale	5428	4729	7055	6073			
Subsurface Hazard	Sharon Springs	7055	6073	7211	6186			
Hydrocarbon	Niobrara	7211	6186	7773	6386			

**OPERATOR COMMENTS AND SUBMITTAL**

Comments Distance from completed zone of this wellbore to nearest completed zone of an offset well within the same unit permitted or completed in the same formation was measured in 2D to the proposed Confluence DJ LLC Flaherty 13-6-1 (API No. 05-123-47448-00).

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells was measured to the producing Latham U41-Y44-14HNB (API No. 05-123-49907-00 operated by Bonanza Creek Operating Company LLC.

This is a Form 2 Refile.

Changes to the original approved Form 2 are: Name change, top of productive interval, bottom hole location, total depth, casing and cement program.

This location has been built; therefore, an OGDG is not required.

This application is in a Comprehensive Area Plan No CAP #: \_\_\_\_\_

OGDP ID#: \_\_\_\_\_ OGDG Name: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Location ID: 442024 Location Name: Middlepark 18

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

Signed: \_\_\_\_\_ Print Name: Andrea Gross

Title: Permit Agent Date: 2/17/2022 Email: agross@upstreampm.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: 4/8/2022

Expiration Date: 04/07/2025

**API NUMBER**

05 123 47449 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.

**Condition of Approval**

**COA Type**

**Description**

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: 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. 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. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
Drilling/Completion Operations	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.  2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Niobrara. Verify coverage with a cement bond log.  3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.
Drilling/Completion Operations	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
Drilling/Completion Operations	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
4 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	Logging: The Middlepark 18-21-3L (API No. 05-123-47444-00), 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 "No open-hole logs were run. The Middlepark 18-21-3L (API No. 05-123-47444-00) is the well in which open-hole logs were run."

Total: 2 comment(s)

## Attachment List

<b>Att Doc Num</b>	<b>Name</b>
402861434	FORM 2 SUBMITTED
402942559	WELL LOCATION PLAT
402942560	DEVIATED DRILLING PLAN
402942561	DIRECTIONAL DATA
402956044	OffsetWellEvaluations Data
403009550	OFFSET WELL EVALUATION

Total Attach: 6 Files

## General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	SLB has no concerns with this application. Final Review Completed.	03/28/2022
Permit	Emailed the SLB to notify them of this pending application.	03/18/2022
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.	03/02/2022
OGLA	Location lies within 300 feet of a mapped Water of the US. COGCC verified with the operator that the mapped drainage does not have an identifiable Ordinary High Water Mark. Location is in compliance with all COGCC Rules.	03/02/2022

Total: 4 comment(s)