

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:

402689771

Date Received:

05/20/2021

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: Canal Well Number: 22-4-2L
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: SWSW Sec: 22 Twp: 1N Rng: 65W Meridian: 6

Footage at Surface: 185 Feet FSL 1046 Feet FWL

Latitude: 40.030170 Longitude: -104.655850

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 01/18/2021

Ground Elevation: 5091

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: 22 Twp: 1N Rng: 65W Footage at TPZ: 470 FSL 2120 FEL
Measured Depth of TPZ: 7967 True Vertical Depth of TPZ: 7267 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 15 Twp: 1N Rng: 65W Footage at BPZ: 470 FNL 2120 FEL
Measured Depth of BPZ: 17624 True Vertical Depth of BPZ: 7267 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 15 Twp: 1N Rng: 65W Footage at BHL: 470 FNL 2120 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: Approved Date of Final Disposition: 02/14/2020

Comments: 1041WOGLA 19-0031 was approved on 2/14/2020.

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.)

T1N R65W Sec. 15: 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: 1170 Feet
Building Unit: 1288 Feet
Public Road: 1483 Feet
Above Ground Utility: 1444 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: 185 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	407-2615	640	T1N R65W Sec. 15: E/2; Sec. 22: E/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: 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: 400 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

COGCC Spacing Order 407-2615 is approved to establish two (2) DSUs. This well is permitted under DSU #1.

DRILLING PROGRAM

Proposed Total Measured Depth: 17624 Feet

TVD at Proposed Total Measured Depth 7267 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: 290 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

<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	2500	1804	2500	0
1ST	8+1/2	5+1/2	P110	20	0	17624	1816	17624	

☐ 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	Lower Arapahoe	187	187	608	608	501-1000	DWR	
Groundwater	Laramie-fox Hills	608	608	1319	1314	501-1000	USGS	
Groundwater	Upper Pierre	1835	1820	2333	2291	1001-10000	Other	COGCC: Upper Pierre Aquifer Water Quality Study, Project #2141
Confining Layer	Pierre Shale	2333	2291	4849	4650			
Hydrocarbon	Sussex	4849	4650	5100	4885			
Hydrocarbon	Shannon	5100	4885	5282	5056			
Confining Layer	Pierre Shale	5282	5056	7249	6897			
Subsurface Hazard	Sharon Springs	7492	7091	7521	7112			
Hydrocarbon	Niobrara	7521	7112	7967	7267			

OPERATOR COMMENTS AND SUBMITTAL

Comments Distance from completed portion of the wellbore to nearest wellbore permitted or completed well in the same formation and within the unit was measured to the Canal 22-3-3L measured in 2-D.

The distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells was measured to the producing HDI KF # 10-3H, operated by Verdad Resources, API#:05-123-46165 using 2-D separation.

Changes made to these wells are well names, target formation, landing points and bottom holes. The casing program, and cement volumes have changed as well as distances due to the wellbore moves. Please utilize the original SUA.

The location has been built and there are wells being drilled on the pad. An OGDG is not required.

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

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

Location ID: 466977

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: 5/20/2021 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: 6/16/2021

Expiration Date: 06/15/2024

API NUMBER

05 123 50941 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

Interim Reclamation	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operation (dated January 5, 2017).
Drilling/Completion Operations	<p>Operator acknowledges the proximity of the listed wells. Operator assures that these offsets 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. This Form 42 shall be filed 48 hours prior to stimulation.</p> <p>Operator will assure that the offset well's surface, intermediate, and production casing pressures will be actively monitored during entire stimulation treatment. A bradenhead test will be performed prior to the beginning of stimulation. If there is any indication of communication between the stimulation treatment and the offset well's intermediate casing, or surface casing in excess of 200 psig, treatment will be stopped and COGCC Engineering notified.</p> <p>Drake 01N-65W-22-8N (123-40503)</p>
Drilling/Completion Operations	<p>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.</p> <p>2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' 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>
3 COAs	

Best Management Practices

No	BMP/COA Type	Description
1	Drilling/Completion Operations	Drilling Wellbore Collision Prevention -Rule 408.t: Prior to drilling operations, 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. The Operator will give notice to all offset Operators prior to drilling.
2	Drilling/Completion Operations	Alternative Logging Program: One of the first wells drilled on the pad will be logged with an open-hole resistivity log with 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 state "Alternative Logging Program - No open-hole logs were run", and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run.

Total: 2 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 List

Att Doc Num	Name
402689771	FORM 2 SUBMITTED
402694104	WELL LOCATION PLAT
402694106	DEVIATED DRILLING PLAN
402694108	DIRECTIONAL DATA
402696471	OffsetWellEvaluations Data
402720809	OFFSET WELL EVALUATION

Total Attach: 6 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed.	06/15/2021
OGLA	The Location ID 466977 and associated Form 2A materials evaluated as part of the review process for this APD. The location went through the SB19-181 objective review process in August 2019 (doc no 2316568) and an update to the objective review process in March 2020 (doc no 1347874). This APD complies with all COGCC Rules and is adequately protective of public health, safety, welfare, the environment, and wildlife resources. OGLA task passed.	06/15/2021
Permit	Made the following changes with operator concurrence: •Updated the open hole logging BMP.	06/14/2021
Permit	•Permitting review complete and task passed.	06/11/2021

Total: 4 comment(s)