

FORM
2

Rev
05/22

State of Colorado

Energy & Carbon Management Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

403699713

Date Received:

10/04/2024

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate

Amend

TYPE OF WELL OIL GAS COALBED OTHER: Helium

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: 1 Wavetech FPI Burlington Farms Well Number: 43-2
Name of Operator: WAVETECH HELIUM INC ECMC Operator Number: 10791
Address: 1801 BROADWAY SUITE 600
City: DENVER State: CO Zip: 80202
Contact Name: Igor Gendelman Phone: (303)354-3383 Fax: ()
Email: igendelman@wavetechenergy.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

ECMC Financial Assurance

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

Surety ID Number (if applicable): 20220043

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: NESE Sec: 2 Twp: 12S Rng: 43W Meridian: 6

Footage at Surface: 1438 Feet ^{FNL/FSL} FSL 738 Feet ^{FEL/FWL} FEL

Latitude: 39.035815 Longitude: -102.188468

GPS Data: GPS Quality Value: 2.1 Type of GPS Quality Value: PDOP Date of Measurement: 07/08/2022

Ground Elevation: 4139

Field Name: HARKER RANCH Field Number: 33557

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: 2 Twp: 12S Rng: 43W Footage at TPZ: 1438 ^{FSL} 1025 ^{FEL}

Measured Depth of TPZ: 5188 True Vertical Depth of TPZ: 5167 ^{FNL/FSL} ^{FEL/FWL}

Base of Productive Zone (BPZ)

Sec: 2 Twp: 12S Rng: 43W Footage at BPZ: 1438 FSL 1025 FEL
Measured Depth of BPZ: 5521 True Vertical Depth of BPZ: 5500 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 2 Twp: 12S Rng: 43W Footage at BHL: 1438 FSL 1025 FEL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: CHEYENNE 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.? No

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:

Comments: Cheyenne County does not require a local permit.

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.)

T12S R43W Sec. 2: S/2

Total Acres in Described Lease: 324 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease #

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 5280 Feet
 Building Unit: 5280 Feet
 Public Road: 5280 Feet
 Above Ground Utility: 4384 Feet
 Railroad: 5280 Feet
 Property Line: 987 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.)
MORROW	MRRW	477-3	320	T12S R43W Sec. 2: S/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: 1025 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: 2901 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: 5521 Feet

TVD at Proposed Total Measured Depth 5500 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 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? No

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

Beneficial reuse or land application plan submitted? No

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
SURF	12+1/4	8+5/8	J55	24	0	550	300	550	0
1ST	7+7/8	5+1/2	J55	15.5	0	5500	398	5500	2700
				Stage Tool	0	2700	382	2700	0

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	High Plains Aquifer	0	0	450	450	0-500	Groundwater Atlas	
Confining Layer	Pierre Shale	450	450	1663	1663			
Confining Layer	Ft. Hayes	1663	1663	1734	1734			
Confining Layer	Codell SS	1734	1734	2033	2033			
Confining Layer	Graneros Shale	2033	2033	2126	2126			
Groundwater	Dakota	2126	2126	2381	2381	1001-10000	Groundwater Atlas	
Confining Layer	Morrison	2381	2381	2945	2945			
Confining Layer	Blaine	2945	2945	3198	3198			
Confining Layer	Stone Corral	3198	3198	3825	3820			
Confining Layer	Neva	3825	3820	3890	3883			
Confining Layer	Foraker	3890	3883	4206	4194			
Confining Layer	Shawnee	4206	4194	4386	4371			
Confining Layer	Heebner	4386	4371	4418	4402			
Confining Layer	Toronto	4418	4402	4434	4418			
Confining Layer	Lansing	4434	4418	4787	4767			
Confining Layer	Marmaton	4787	4767	4826	4806			
Confining Layer	Pawnee	4826	4806	4868	4848			
Confining Layer	Ft. Scott	4868	4848	4930	4910			
Confining Layer	Cherokee	4930	4910	5076	5055			
Confining Layer	Atoka	5076	5055	5188	5167			
Hydrocarbon	Morrow Formation	5188	5167	5282	5261			
Confining Layer	Lower Morrow Ls	5282	5261	5318	5297			
Confining Layer	St. Louis	5318	5297	5344	5323			
Confining Layer	Spergen	5344	5323	5521	5500			

OPERATOR COMMENTS AND SUBMITTAL

Comments

This well will not be hydraulically fractured.

This section is under pressured. Therefore, an annual preventor is sufficient for well control.

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

Oil and Gas Development Plan Name Burlington-Rosa OGDP OGDP ID#: 485043

Location ID: 485671

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: 10/4/2024 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 ECMC Rules, applicable orders, and SB 19-181 and is hereby approved.

ECMC Approved: [Signature] Director of ECMC Date: 11/4/2024

Expiration Date: 11/07/2026

API NUMBER
05 017 07823 00

CONDITIONS OF APPROVAL, IF ANY LIST

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.

Table with 2 columns: COA Type, Description. Contains 2 rows of drilling/completion operations and a summary row for 2 COAs.

Best Management Practices

Table with 2 columns: No BMP/COA Type, Description. Contains 1 row for drilling/completion operations.

Total: 1 comment(s)

ATTACHMENT LIST

Att Doc Num	Name
403699713	FORM 2 SUBMITTED
403947001	WELL LOCATION PLAT
403947003	DEVIATED DRILLING PLAN
403947004	WELLBORE DIAGRAM
403947006	DIRECTIONAL DATA

Total Attach: 5 Files

General Comments

User Group	Comment	Comment Date
Permit	Final Review Completed.	10/30/2024
Permit	Corrected DSU and corrected TPZ footages/depths, per operator email 10/30/2024.	10/30/2024
Permit	Confirm DSU order # and associated unit setback distances.	10/23/2024
Engineer	<ul style="list-style-type: none"> •Surface casing check complete •Deepest water well within 2 miles is 257'. •Dakota-Cheyenne interval is from 2156-2670' according to the DWR Aquifer Determination Tool. •Engineering review complete 	10/23/2024
OGLA	The Commission approved OGDG #485043 on November 8, 2023 for the Oil and Gas Location related to this Form 2. OGLA task passed.	10/07/2024

Total: 5 comment(s)