

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:

403697349

**(SUBMITTED)**

Date Received:

04/14/2024

### 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: Maverick Well Number: 2W-20-02  
 Name of Operator: EXTRACTION OIL & GAS INC ECMC Operator Number: 10459  
 Address: 555 17TH STREET SUITE 3700  
 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

#### ECMC Financial Assurance

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

Surety ID Number (if applicable): \_\_\_\_\_

#### 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: NWSE Sec: 36 Twp: 7N Rng: 67W Meridian: 6

Footage at Surface: 2360 Feet FSL 2099 Feet FEL

Latitude: 40.529910 Longitude: -104.839693

GPS Data: GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Date of Measurement: 08/10/2022

Ground Elevation: 4897

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: 2 Twp: 6N Rng: 67W Footage at TPZ: 1525 FSL 470 FEL  
Measured Depth of TPZ: 10524 True Vertical Depth of TPZ: 7001 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 4 Twp: 6N Rng: 67W Footage at BPZ: 1378 FSL 150 FEL
Measured Depth of BPZ: 20683 True Vertical Depth of BPZ: 7001 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 4 Twp: 6N Rng: 67W Footage at BHL: 1378 FSL 150 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? [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: 08/23/2023

Comments: Local Permit Number: 1041WOGLA23-0015

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.)

Township 6 North, Range 67 West
Section 2: SW4

Total Acres in Described Lease: 166 Described Mineral Lease is: [X] Fee [ ] State [ ] Federal [ ] Indian

Federal or State Lease #

**SAFETY SETBACK INFORMATION**

Distance from Well to nearest:

Building: 2008 Feet  
 Building Unit: 2008 Feet  
 Public Road: 2350 Feet  
 Above Ground Utility: 338 Feet  
 Railroad: 5280 Feet  
 Property Line: 223 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	407-3571	720	T6NR67W: Sec 2 & 3 - S2, Sec 4 -E2SE4

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: 503 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: 20747 FeetTVD at Proposed Total Measured Depth 7001 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: 453 Feet  No well belonging to another operator within 1,500 feetWill a closed-loop drilling system be used? YesIs H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater thanor 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? 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	NA	36.95	0	80	105	80	0
SURF	13+1/2	9+5/8	J55	36	0	1500	509	1500	0
1ST	8+1/2	5+1/2	P110	20	1500	20683	3020	20683	1500

 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	LaramieFox HillsFormation	24	24	196	196	1001-10000	Other	CSU Domestic Water Analysis Report Larry Moore Well-176559
Confining Layer	Pierre Formation	196	196	471	471			
Groundwater	Upper Pierre Aquifer	471	471	1408	1381	1001-10000	Other	Colorado COGCC Project Number 2141 October 2017
Confining Layer	Base of Upper Pierre	1408	1381	4811	3716			
Hydrocarbon	Larimer Parkman Sandstone	4811	3716	5298	4011			Not Productive in this area
Confining Layer	Pierre Formation	5298	4011	5611	4201			
Hydrocarbon	Terry Sussex Sandstone	5611	4201	6056	4471			Not Productive in this area
Confining Layer	Pierre Formation	6056	4471	6568	4781			
Hydrocarbon	Hygiene Shannon Formation	6568	4781	6956	5016			Not Productive in this area
Confining Layer	Pierre Formation	6956	5016	10257	6961			
Subsurface Hazard	Sharon Springs Member	10257	6961	10524	7001			Sloughing Shales
Hydrocarbon	Niobrara Formation	10524	7001	20683	7001			

**OPERATOR COMMENTS AND SUBMITTAL**

Comments

The distance to the completed portion of the nearest well in the same unit on the "Spacing & Formation" tab is measured to the Maverick 2W-20-03. This distance was measured in 2-dimensional space.

The nearest existing or proposed wellbore belonging to another operator is the Bower 1-3, API #05-123-11189.

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 No CAP #: \_\_\_\_\_

Oil and Gas Development Plan Name Maverick 7N67W - West OGD OGD ID#: 485539

Location ID: 486004

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, Permitting Date: 4/14/2024 Email: jannable@civiresources.com

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: \_\_\_\_\_ Director of ECMC Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

API NUMBER

05

**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.

**COA Type**

**Description**

0 COA	
-------	--

**Best Management Practices**

**No BMP/COA Type**

**Description**

1	Drilling/Completion Operations	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	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.
3	Drilling/Completion Operations	Operator acknowledges and will comply with COGCC/ECMC policy for Bradenhead Monitoring during Hydraulic Fracturing treatments in the Greater Wattenberg Area dated May 29, 2012.

Total: 3 comment(s)

**ATTACHMENT LIST**

<b>Att Doc Num</b>	<b>Name</b>
403753283	OffsetWellEvaluations Data
403753285	WELL LOCATION PLAT
403753286	DEVIATED DRILLING PLAN
403753287	DIRECTIONAL DATA
403753288	OTHER

Total Attach: 5 Files

**General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
		Stamp Upon Approval

Total: 0 comment(s)