

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:

403698728

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: MaverickWell Number: 2W-20-04Name of Operator: EXTRACTION OIL & GAS INCECMC Operator Number: 10459Address: 555 17TH STREET SUITE 3700City: DENVER State: CO Zip: 80202Contact 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): 20190110

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: 2373 Feet FSL 2056 Feet FEL
Latitude: 40.529946 Longitude: -104.839538GPS Data: GPS Quality Value: 2.9 Type of GPS Quality Value: PDOP Date of Measurement: 08/10/2022Ground Elevation: 4896Field Name: WATTENBERG Field Number: 90750Well 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: 475 FSL 470 FELMeasured Depth of TPZ: 11230 True Vertical Depth of TPZ: 7001 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 4 Twp: 6N Rng: 67W Footage at BPZ: 475 FSL 150 FEL
Measured Depth of BPZ: 21370 True Vertical Depth of BPZ: 7001 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 4 Twp: 6N Rng: 67W Footage at BHL: 475 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? ☒ 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: 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: ☒ 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.)

Township 6 North, Range 67 West
Section 2: SW4

Total Acres in Described Lease: 166

Described Mineral Lease is: ☒ 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: 2362 Feet
Above Ground Utility: 333 Feet
Railroad: 5280 Feet
Property Line: 211 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: 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

DRILLING PROGRAM

Proposed Total Measured Depth: 21370 Feet

TVD 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: 181 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

Casing Type	Size of Hole	Size of Casing	Grade	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
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	21370	3120	21370	1500

☐ 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	Laramie-Fox hills	24	24	196	196	1001-10000	Other	CSU Domestic Water Analysis Report - Larry Moore Well - 176559
Confining Layer	Pierre Formation	196	196	472	471			
Groundwater	Upper Pierre	472	471	1428	1381	1001-10000	Other	Colorado COGCC Project Number 2141 October 2017
Confining Layer	Base of Upper Pierre	1428	1381	5102	3716			
Hydrocarbon	Larimer Parkman Sandstone	5030	3716	5625	4011			Not Productive in this area
Confining Layer	Pierre Formation	5625	4011	5962	4201			
Hydrocarbon	Terry Sussex Sandstone	5962	4201	6441	4471			Not Productive in this area
Confining Layer	Pierre Formation	6441	4471	6991	4781			
Hydrocarbon	Hygiene Shannon Sandstone	6991	4781	7409	5016			Not Productive in this area
Confining Layer	Pierre Formation	7409	5016	10950	6961			
Subsurface Hazard	Sharon Springs Member	10950	6961	11229	7001			Sloughing Shales
Hydrocarbon	Niobrara	11229	7001	21370	7001			

OPERATOR COMMENTS AND SUBMITTAL

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.

<u>COA Type</u>	<u>Description</u>
Planning	Pursuant to Rule 702.b.(2), the approval of this Application for Permit to Drill constitutes a "change in circumstance" to the approved Financial Assurance Plan. The Operator must file a revised Form 3, Financial Assurance Plan, within 10 days of this approval.
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, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer 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 ECMC 2 business days prior to MIRU (Spud Notice), for the first well/activity on the pad and provide 2 business days spud notice for all subsequent wells drilled on the pad. 2) Comply with Rule 408.j and provide cement coverage from the end of production casing to a minimum of 500' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all aquifers are covered.
3 COAs	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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

<u>Att Doc Num</u>	<u>Name</u>
403698728	FORM 2 SUBMITTED
403753299	OffsetWellEvaluations Data

403753302	WELL LOCATION PLAT
403753305	DEVIATED DRILLING PLAN
403753308	OTHER
403753311	DIRECTIONAL DATA
403809503	OFFSET WELL EVALUATION

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	05/17/2024
Engineer	Offset Wells Evaluated.	05/14/2024
Permit	Passes Permitting • Added Surety ID Number to reflect most recent blanket plugging bond.	05/10/2024
OGLA	The Commission approved OGDG #485539 on January 24, 2024 for the Oil and Gas Location related to this Form 2. OGLA task passed.	04/16/2024

Total: 4 comment(s)