

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:

403846121

(SUBMITTED)

Date Received:

08/05/2024

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: Ruby 6-65 22-27

Well Number: 4HN

Name of Operator: GMT EXPLORATION COMPANY LLC

ECMC Operator Number: 10243

Address: 4949 S NIAGARA ST SUITE 250

City: DENVER

State: CO

Zip: 80237

Contact Name: Maxwell Blair

Phone: (303)586-9291

Fax: (720)946-3028

Email: mblair@gmtexploration.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): 20070102

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: 22 Twp: 6S Rng: 65W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 1842 Feet FSL 858 Feet FEL

Latitude: 39.511962

Longitude: -104.645826

GPS Data:

GPS Quality Value: 1.2

Type of GPS Quality Value: PDOP

Date of Measurement: 04/25/2019

Ground Elevation: 6179

Field Name: WILDCAT

Field Number: 99999

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: 6S Rng: 65W

Footage at TPZ: 2057 FSL 1958 FWL

Measured Depth of TPZ: 8980

True Vertical Depth of TPZ: 8134

FNL/FSL

FEL/FWL

Base of Productive Zone (BPZ)Sec: 27 Twp: 6S Rng: 65WFootage at BPZ: 600 FSL 1954 FWLMeasured Depth of BPZ: 15727True Vertical Depth of BPZ: 8134 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 27 Twp: 6S Rng: 65WFootage at BHL: 550 FSL 1954 FWL

FNL/FSL

FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATIONCounty: ELBERTMunicipality: 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: Waived Date of Final Disposition: _____Comments:

Oil and Gas Pad sites require a building permit site plan, which is in development. Elbert County waived its right to precede.

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS LOCATIONSurface Owner of the land at this Well's Oil and Gas Location: ☒ Fee ☐ State ☐ Federal ☐ IndianMineral 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.)

N/2, SE/4, Section 22, T6S, R65W

Total Acres in Described Lease: 480Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 966 Feet
Building Unit: 2088 Feet
Public Road: 2568 Feet
Above Ground Utility: 1021 Feet
Railroad: 5280 Feet
Property Line: 809 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 | 535-1186 | 960 | 27: All; 22: 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: 600 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: 457 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

Approved Order 535-1186

DRILLING PROGRAM

Proposed Total Measured Depth: 15777 Feet

TVD at Proposed Total Measured Depth 8134 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? Yes

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 |
|-------------|--------------|----------------|--------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 24 | 16 | N/A | 42 | 0 | 80 | 100 | 80 | 0 |
| SURF | 12+1/2 | 9+5/8 | J55LTC | 36 | 0 | 2650 | 900 | 2650 | 0 |
| 1ST | 8+1/2 | 5+1/2 | HCP110 | 20 | 0 | 15777 | 2370 | 15777 | |

☐ 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 | Dawson | 46 | 46 | 507 | 507 | 0-500 | Other | COGIS-Sample Site Inquiry |
| Groundwater | Denver | 548 | 548 | 1462 | 1434 | 0-500 | Other | COGIS-Sample Site Inquiry |
| Groundwater | Upper Arapahoe | 1504 | 1473 | 1983 | 1910 | 0-500 | Other | COGIS-Sample Site Inquiry |
| Groundwater | Laramie-Fox Hills | 2299 | 2197 | 2731 | 2591 | 0-500 | Other | COGIS-Sample Site Inquiry |
| Confining Layer | Pierre Shale | 2731 | 2591 | 3576 | 3360 | | | |
| Hydrocarbon | Sussex-Terry | 3576 | 3360 | 3740 | 3510 | | | Not Productive in Area |
| Hydrocarbon | Shannon-Hygiene | 6046 | 5609 | 6342 | 5880 | | | Not Productive in Area |
| Confining Layer | Lower Pierre Shale | 6342 | 5880 | 8472 | 7919 | | | |
| Confining Layer | Sharon Springs Shale | 8472 | 7919 | 8485 | 7929 | | | Sloughing Clay |
| Hydrocarbon | Niobrara | 8980 | 8134 | 15777 | 8134 | | | The TVD of the deepest hydrocarbon zone is the bottom of the well and not the bottom of the formation. The formation is not planned to be exited. |

OPERATOR COMMENTS AND SUBMITTAL

Comments

Nearest wellbore in proposed unit is the Ruby 6-65 22-27 5HN per anti-collision.

There are no outside-operated wells within 1500'.

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 600' FSL and 1954' FWL of Section 27. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

This application is in a Comprehensive Area Plan No CAP #: _____
Oil and Gas Development Plan Name _____ OGDID #: _____

Location ID: 479191

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: Permitting Agent Date: 8/5/2024 Email: agross@upstreampm.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

05 039 06746 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.

COA Type **Description**

| | |
|-------|--|
| 0 COA | |
|-------|--|

Best Management Practices

No BMP/COA Type **Description**

| | | |
|---|--------------------------------|--|
| 1 | Drilling/Completion Operations | Logging: The Crystal 6-65 22-10HN (API No. 05-039-06742) well drilled on the pad was logged with an open-hole Resistivity Log and Gamma Ray Log from the kickoff 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 Crystal 6-65 22-10HN (API No. 05-039-06742) is the well in which open-hole logs were run." |
|---|--------------------------------|--|

Total: 1 comment(s)

ATTACHMENT LIST

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-------------|
| | |

Total Attach: 0 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)

