

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:

403820006

**(SUBMITTED)**

Date Received:

08/02/2024

### 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: Irwin 6-65 23-11 Well Number: 6HN  
 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: ( )  
 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: SESE Sec: 23 Twp: 6S Rng: 65W Meridian: 6

Footage at Surface: 1124 Feet FSL 431 Feet FEL

Latitude: 39.509839 Longitude: -104.625872

GPS Data: GPS Quality Value: 1.3 Type of GPS Quality Value: PDOP Date of Measurement: 04/26/2019

Ground Elevation: 6222

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: 23 Twp: 6S Rng: 65W Footage at TPZ: 2037 FNL 2379 FEL  
Measured Depth of TPZ: 8964 True Vertical Depth of TPZ: 8157 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 11 Twp: 6S Rng: 65W Footage at BPZ: 600 FNL 2370 FEL  
Measured Depth of BPZ: 20968 True Vertical Depth of BPZ: 8157 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 11 Twp: 6S Rng: 65W Footage at BHL: 550 FNL 2370 FEL  
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: ELBERT 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: 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 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.)

Please see attached Lease Map.

Total Acres in Described Lease: 614 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease #

## SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1684 Feet  
Building Unit: 1895 Feet  
Public Road: 2564 Feet  
Above Ground Utility: 1944 Feet  
Railroad: 5280 Feet  
Property Line: 431 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	535-1185	1600	11&14:All;23:N/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: 446 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 535-1185

**DRILLING PROGRAM**Proposed Total Measured Depth: 21018 FeetTVD at Proposed Total Measured Depth 8157 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 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	24	16	N/A	42	0	80	100	80	0
SURF	12+1/2	9+5/8	J55LTC	36	0	2644	900	2644	0
1ST	8+1/2	5+1/2	HCP110	20	0	21018	3310	21018	

 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	Dawson	109	109	520	520	0-500	Other	COGIS - Sample Site Inquiry
Groundwater	Denver	575	574	1452	1422	0-500	Other	COGIS - Sample Site Inquiry
Groundwater	Upper Arapahoe	1488	1454	1988	1914	0-500	Other	COGIS - Sample Site Inquiry
Groundwater	Laramie-Fox Hills	2312	2212	2730	2596	0-500	Other	COGIS - Sample Site Inquiry
Confining Layer	Pierre Shale	2730	2596	3453	3260			
Hydrocarbon	Sussex-Terry	3453	3260	3615	3409			Not Productive in Area
Hydrocarbon	Shannon-Hygiene	6024	5622	6189	5775			Not Productive in Area
Confining Layer	Pierre Shale	6189	5775	8423	7917			
Confining Layer	Sharon Springs Shale	8423	7917	8469	7952			Sloughing Clay
Hydrocarbon	Niobrara	8469	7952	21018	8157			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 Irwin 6-65 23-11 7HN.

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' FNL and 2370' FEL of Section 11. 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 \_\_\_\_\_ OGDP ID#: \_\_\_\_\_

Location ID: 479194

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: 8/2/2024 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 06718 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.

<u>COA Type</u>	<u>Description</u>
0 COA	

**Best Management Practices**

<u>No BMP/COA Type</u>	<u>Description</u>
1 Drilling/Completion Operations	Logging: The Irwin 6-65 23-11 10HN (API No. 05-039-06722) 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 Irwin 6-65 23-11 10HN (API No. 05-039- 6722) is the well in which open-hole logs were run."

Total: 1 comment(s)

**ATTACHMENT LIST**

<b>Att Doc Num</b>	<b>Name</b>

Total Attach: 0 Files

**General Comments**

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

Total: 0 comment(s)

