

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:

403678533

Date Received:

02/19/2024

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: IPU 1291 Well Number: 13-24 H3
Name of Operator: GUNNISON ENERGY LLC ECMC Operator Number: 10515
Address: 1801 BROADWAY #1150
City: DENVER State: CO Zip: 80202
Contact Name: Tyson Johnston Phone: (303)296-8807 Fax: ()
Email: tyson.johnston@oxbow.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 \$ 1136

WELL LOCATION INFORMATION

Surface Location

QtrQtr: NENW Sec: 24 Twp: 12S Rng: 91W Meridian: 6

Footage at Surface: 149 Feet FNL 2134 Feet FWL

Latitude: 39.006505 Longitude: -107.505092

GPS Data: GPS Quality Value: 2.2 Type of GPS Quality Value: PDOP Date of Measurement: 01/02/2024

Ground Elevation: 7809

Field Name: PICEANCE HORIZONTAL NIOBRARA Field Number: 68810

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: 13 Twp: 12S Rng: 91W Footage at TPZ: 963 FSL 1443 FEL
Measured Depth of TPZ: 9007 True Vertical Depth of TPZ: 7430 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 12 Twp: 12S Rng: 91W Footage at BPZ: 2376 FSL 769 FWL
Measured Depth of BPZ: 16368 True Vertical Depth of BPZ: 7902 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 12 Twp: 12S Rng: 91W Footage at BHL: 2376 FSL 769 FWL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: DELTA 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: Date of Final Disposition:

Comments:

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 12 South, Range 91 West, 6th P.M.
 Section 13: Lot 6, S/2SW/4, SW/4SE/4;
 Section 24: Lots 1, 2, NE/4NW/4, NW/4NE/4, AND H.E.S. No. 132
 Section 25: Lot 2, E/2NW/4, NE/4, N/2S/2
 H.E.S. No. 161 lying in Sections 23 and 24
 H.E.S. No. 133 lying in Sections 23, 24, 25, and 26
 H.E.S. No. 134 lying in Sections 25, 26, 35, and 36

Total Acres in Described Lease: 1354 Described Mineral Lease is: Fee State Federal Indian
 Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 236 Feet
 Building Unit: 4498 Feet
 Public Road: 5280 Feet
 Above Ground Utility: 5280 Feet
 Railroad: 5280 Feet
 Property Line: 1273 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-MANCOS	NBMN	586-1	5292	12S-90W Sec 18: All; Sec 19: All; Sec 30: All, 12S-91W Sec 11: All; Sec 12: All; Sec 13: All; Sec 14: All; Sec 24: All; Sec 25: All

Federal or State Unit Name (if appl): Iron Point Unit

Unit Number: COC074545X

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: 3485 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: 1180 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: 16368 Feet

TVD at Proposed Total Measured Depth 7902 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	30	20	Line	36	0	120	200	120	0
SURF	17+1/2	13+3/8	J55	68	0	2760	2470	2760	0
1ST	12+1/4	9+5/8	P110	40	0	5822	835	5822	0
2ND	8+3/4	5+1/2	P110	23	0	16368	2934	16368	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	Wasatch	50	50	763	763	501-1000	Other	Grand Mesa, Uncompahgre, and Gunnison National Forests Supplemental Forest Plan Assessment: Groundwater
Hydrocarbon	Williamsfork	826	826	3127	3127			
Hydrocarbon	Cameo Coals	3127	3127	3242	3242			
Confining Layer	Rollins	3242	3242	3400	3400			
Hydrocarbon	Cozzette	3863	3863	3996	3966			
Hydrocarbon	Corcoran	3996	3996	4059	4059			
Hydrocarbon	Mancos	4059	4059	7517	6894			
Hydrocarbon	Niobrara-Mancos	7517	6894	16368	7902			

OPERATOR COMMENTS AND SUBMITTAL

Comments Operator Comment Offset Well Review: We provided a 3D distance for the offset wells since the majority of them are Mesaverde wells and much shallower than the horizontals being proposed.

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

Oil and Gas Development Plan Name IPU Lower 1291 #13-24 OGDID#: 484162

Location ID: 434522

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Jessica Donahue

Title: Compliance Specialist Date: 2/19/2024 Email: jdonahue@ardorenvironmental.

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:  Director of ECMC Date: 6/6/2024

Expiration Date: 11/14/2026

API NUMBER

05 029 06118 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>
Planning	Operator will log one (1) additional wells during the first rig occupation with open-hole resistivity log with gamma-ray log from the kick-off point into the surface casing for the stratigraphically deepest wells for a total of two wells logged.
Drilling/Completion Operations	1)Operator shall comply with the most current revision of the Northwest Notification Policy. 2)Operator shall provide cement coverage from the first and second casing shoes to a minimum of 200' above all Mesa Verde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify first and second casings cement coverage with a cement bond log.
2 COAs	

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	Open Hole Logging Exception: One of the first wells drilled on the pad will be logged with cased-hole neutron log with gamma-ray log from the kick-off 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 in that well and have those logs attached. The Form 5 for each well shall state "Open Hole Logging Exception - No open-hole logs were run", and shall clearly identify the type of log and the well (by API#) in which open-hole logs were run."

Total: 1 comment(s)

ATTACHMENT LIST

<u>Att Doc Num</u>	<u>Name</u>
2115154	OPEN HOLE LOGGING EXCEPTION
403678533	FORM 2 SUBMITTED
403678712	OffsetWellEvaluations Data
403678714	WELL LOCATION PLAT
403678715	DEVIATED DRILLING PLAN
403678728	DIRECTIONAL DATA
403787643	OffsetWellEvaluations Data
403815879	OFFSET WELL EVALUATION

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	06/06/2024
Permit	-Corrected field name form Wildcat to Piceance Horizontal Niobrara -Corrected unit configuration -Added logging BMP and logging COA	06/03/2024
Engineer	Offset water well check: There are no permitted water wells within one mile of this proposed surface hole location. (The water well referenced in the offset well review is Permit Number 323340 and greater than 1 mile from the surface location) Operator plans to P&A HOTCHKISS 1291 13-24 029-06103 prior to completion operations Iron Point Unit Hotchkiss 1291 13-24D H1 029-06107 is the only offset well drilled into the Niobrara formation. Wellbore is isolated with a TOC of 2690 ft and the most recent BH pressure was 0 psi There is offset injection into the CORCORAN formation from ALLEN 1291 #12-13 029-06095. Operators APD is approved with a casing and cement plan to isolate the formation with the First String Uploaded updated and formatted version of the offset well review	05/13/2024
OGLA	The Commission approved OGDG #484162 on November 15, 2023 for the Oil and Gas Location related to this Form 2. OGLA task passed.	02/20/2024
OGLA	With operator concurrence, the following was corrected: Distance to Nearest Building Unit. Distance to Nearest Property Line.	02/20/2024

Total: 5 comment(s)