

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number:

403257006

(SUBMITTED)

Date Received:

05/24/2023

APPLICATION FOR PERMIT TO

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and OperateAmend ☐TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER: _____Refile ☒ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: BCU

Well Number: 0993-14-10E

Name of Operator: LARAMIE ENERGY LLC

COGCC Operator Number: 10433

Address: 1700 LINCOLN ST STE 3950

City: DENVER

State: CO

Zip: 80203

Contact Name: Katy Middleton

Phone: (970)9858240

Fax: ()

Email: kmiddleton@laramie-energy.com

FINANCIAL ASSURANCE FOR PLUGGING, ABANDONMENT, AND RECLAMATION

COGCC Financial Assurance

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

Surety ID Number (if applicable): 20120081

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: SWSW Sec: 14 Twp: 9S Rng: 93W Meridian: 6

FNL/FSL

FEL/FWL

Footage at Surface: 1240 Feet FSL 617 Feet FWL

Latitude: 39.272718

Longitude: -107.744688

GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP

Date of Measurement: 12/05/2022

Ground Elevation: 7397

Field Name: BUZZARD CREEK

Field Number: 9500

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: 14 Twp: 9S Rng: 93W

Footage at TPZ: 2280 FSL 1387 FEL

Measured Depth of TPZ: 7064

True Vertical Depth of TPZ: 6114 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)Sec: 14 Twp: 9S Rng: 93WFootage at BPZ: 2280 FSL 1387 FELMeasured Depth of BPZ: 8814True Vertical Depth of BPZ: 7864 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 14 Twp: 9S Rng: 93WFootage at BHL: 2280 FSL 1387 FEL

FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATIONCounty: MESAMunicipality: 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: Approved Date of Final Disposition: 09/14/2022

Comments: Per the Mesa County Land Development Code Table 6-1: Use Table and Section 6.02(Q), "Oil and Gas Drilling" is an allowed use in the Agricultural, Forestry, Transitional (AFT) zone district. The subject parcel is designated by Mesa County as AFT zone district. The BCU 14L meets all the Mesa County zoning setback requirements for the AFT zone district. Laramie submitted an Oil and Gas Location Application to Mesa County on August 22, 2022. Mesa County assigned "PRO2022-0271" as the project number for the application. The Land Development Application Public Notice sign for the application was posted on the subject parcel, at the entrance to the BCU 14L, on August 28, 2022. The public notice signed was posted for more than 15 days. The Mesa County Community Development Planning Division issued the Oil and Gas Site Location Approval Document on September 14th, 2022.

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.)

See Lease Map

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

Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 1071 Feet
Building Unit: 1387 Feet
Public Road: 1074 Feet
Above Ground Utility: 1074 Feet
Railroad: 5280 Feet
Property Line: 572 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.)
WILLIAMS FORK-ILES	WFILS	1-229		Section 14

Federal or State Unit Name (if appl): Buzzard Creek

Unit Number: COC0047597A

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: 1387 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: 660 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: 8814 Feet

TVD at Proposed Total Measured Depth 7864 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? No

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	SA-53B	36.94	0	84	150	84	0
SURF	11	8+5/8	J-55	24	0	1500	269	1500	0
1ST	7+7/8	4+1/2	HCP110	11.6	1800	8814	1198	8814	1800

☐ 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	Freshwater/Groundwater	0	0	600	600	501-1000	DWR	Hayward ranch water well domestic – stock & irrigation. Water TDS: 300-1500 mg/L
Confining Layer	Wasatch	600	600	2966	2634			N/A
Hydrocarbon	Wasatch 'G' Sand	2966	2634	3699	3222	1001-10000	Other	Wasatch Producers Sec 5 & Sec 9 & Sec 15 T6S, R97W API: 05045200130001, 05045200230000, 05045106860000 (11/12/2020) (TDS: 760-2,050 mg/L. Fluid Present: Saltwater
Hydrocarbon	Fort Union	3699	3222	4364	3756			Potential Hazard: Instability
Hydrocarbon	Lower Wasatch	4364	3756	5474	4646			Fluid Present: Saltwater
Hydrocarbon	Ohio Creek	5474	4646	6053	5135	>10000	Produced Water Sample	Wells API# 05077087650000 Buzzard Creek 22-3 Potential Hazard: Loss circulation; Fluid Present: Saltwater
Hydrocarbon	Williams Fork	6053	5135	7064	6114	>10000	Produced Water Sample	Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L
Hydrocarbon	Top of Gas	7064	6114	7867	6917	>10000	Produced Water Sample	Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L
Hydrocarbon	Cameo	7867	6917	8595	7645	>10000	Produced Water Sample	Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L
Hydrocarbon	Base Cameo	8595	7645	8614	7664	>10000	Produced Water Sample	Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L
Hydrocarbon	Rollins	8614	7664	8814	7864	>10000	Produced Water Sample	Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L

OPERATOR COMMENTS AND SUBMITTAL

Comments Laramie Energy, LLC is the Surface Owner of the BCU 14L well pad location. Well BCU 0993-14-10E is not located in a mapped HPH. BHL Coordinates: 39.274538; -107.733685

This application is in a Comprehensive Area Plan No

CAP #: _____

Oil and Gas Development Plan Name 2022 BCU 14L OGD

OGDP ID#: 483861

Location ID: 391336

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

Signed: _____

Print Name: Katy Middleton

Title: Regulatory Specialist

Date: 5/24/2023

Email: kmiddleton@laramie-

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____

Director of COGCC

Date: _____

Expiration Date: _____

API NUMBER

05 077 10029 00

Conditions Of Approval

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	Alternative Logging Program: One of the wells drilled on the pad will be logged with open-hole Resistivity Log and Gamma Ray Log from TD 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 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.
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Total: 1 comment(s)

Attachment List

Att Doc Num

Name

403257058	WELL LOCATION PLAT
403314785	DIRECTIONAL DATA
403314786	DEVIATED DRILLING PLAN
403314789	DEVIATED DRILLING PLAN
403321038	OffsetWellEvaluations Data
403411574	MINERAL LEASE MAP

Total Attach: 6 Files

General Comments

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

Total: 0 comment(s)

