

FORM  
2

Rev  
05/22

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:

403257707

(SUBMITTED)

Date Received:

05/24/2023

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: BCU Well Number: 0993-14-05E  
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: 1230 Feet FSL 588 Feet FWL

Latitude: 39.272700 Longitude: -107.744792

GPS Data: GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 12/05/2022

Ground Elevation: 7398

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: 1643 FNL 2164 FEL  
Measured Depth of TPZ: 7220 True Vertical Depth of TPZ: 6119 FNL/FSL FEL/FWL

**Base of Productive Zone (BPZ)**Sec: 14 Twp: 9S Rng: 93WFootage at BPZ: 1643 FNL 2164 FELMeasured Depth of BPZ: 8970True Vertical Depth of BPZ: 7869 FNL/FSL FEL/FWL**Bottom Hole Location (BHL)**Sec: 14 Twp: 9S Rng: 93WFootage at BHL: 1643 FNL 2164 FEL

FNL/FSL FEL/FWL

**LOCAL GOVERNMENT PERMITTING INFORMATION**County: 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 LOCATION**Surface 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: 1091 Feet  
Building Unit: 1411 Feet  
Public Road: 1086 Feet  
Above Ground Utility: 1086 Feet  
Railroad: 5208 Feet  
Property Line: 602 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: 1643 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: 1813 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: 8970 Feet

TVD at Proposed Total Measured Depth 7869 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 H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or 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? 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          | 8970          | 1224      | 8970    | 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        | 3020        | 2639          |            |                       | N/A  |
| Hydrocarbon     | Wasatch 'G' Sand       | 3020     | 2639       | 3782        | 3227          | 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             | 3782     | 3227       | 4474        | 3761          |            |                       | Potential Hazard: Instability  |
| Hydrocarbon     | Lower Wasatch          | 4474     | 3761       | 5627        | 4651          |            |                       | Fluid Present: Saltwater   |
| Hydrocarbon     | Ohio Creek             | 5627     | 4651       | 6209        | 5140          | >10000     | Produced Water Sample | Wells API# 05077087650000 Buzzard Creek 22-3 Potential Hazard: Loss circulation; Fluid Present: Saltwater  |
| Hydrocarbon     | Williams Fork          | 6209     | 5140       | 7220        | 6119          | >10000     | Produced Water Sample | Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L  |
| Hydrocarbon     | Top of Gas             | 7220     | 6119       | 8023        | 6922          | >10000     | Produced Water Sample | Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L  |
| Hydrocarbon     | Cameo                  | 8023     | 6922       | 8751        | 7650          | >10000     | Produced Water Sample | Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L  |
| Hydrocarbon     | Base Cameo             | 8751     | 7650       | 8770        | 7669          | >10000     | Produced Water Sample | Sup & Shep 0993-25-16W API# 05077105790000 Water TDS: 40,000 mg/L  |
| Hydrocarbon     | Rollins                | 8770     | 7669       | 8970        | 7869          | >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 0993-14-05E is not located in a mapped HPH. BHL Coordinates: 39.279183; -107.735985

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 10034 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.

Total: 1 comment(s)

### Attachment List

#### Att Doc Num

#### Name

403257748 WELL LOCATION PLAT

403314844 DEVIATED DRILLING PLAN

403314845 DEVIATED DRILLING PLAN

403314846 DIRECTIONAL DATA

403321056 OffsetWellEvaluations Data

403411632 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)

