

FORM
2
Rev
10/24

State of Colorado Energy & Carbon Management Commission

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Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

404366494

Date Received:

10/02/2025

APPLICATION FOR PERMIT TO

Drill Deepen Re-enter Recomplete and Operate Amend

TYPE OF WELL OIL GAS COALBE GEOTHERMAL OTHER: _____

Refile

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Sidetrack

Well Name: Currier Well Number: 0993-16-01M
Name of Operator: LARAMIE ENERGY LLC ECMC Operator Number: 10433
Address: 1700 LINCOLN ST STE 3950
City: DENVER State: CO Zip: 80203
Contact Name: Lori Muhr Phone: (970)312-6479 Fax: ()
Email: LMuhr@Laramie-Energy.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): 20210135

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: SWNE Sec: 16 Twp: 9S Rng: 93W Meridian: 6

Footage at Surface: 2176 Feet FNL 2316 Feet FEL

Latitude: 39.278011 Longitude: -107.773427

GPS Data: GPS Quality Value: 1.5 Type of GPS Quality Value: PDOP Date of Measurement: 07/05/2023

Ground Elevation: 7465

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: 16 Twp: 9S Rng: 93W Footage at TPZ: 158 FNL 2602 FEL

Measured Depth of TPZ: 6268 True Vertical Depth of TPZ: 5854 FNL/FSL FEL/FWL

Base of Productive Zone (BPZ)

Sec: 16 Twp: 9S Rng: 93W Footage at BPZ: 158 FNL 2602 FEL
Measured Depth of BPZ: 9067 True Vertical Depth of BPZ: 8653 FNL/FSL FEL/FWL

Bottom Hole Location (BHL)

Sec: 16 Twp: 9S Rng: 93W Footage at BHL: 158 FNL 2602 FEL
FNL/FSL FEL/FWL

LOCAL GOVERNMENT PERMITTING INFORMATION

County: MESA 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 and §37-90.5-107(2)(b)(I) C.R.S, the following questions pertain to the Relevant Local Government approval of the siting of the proposed Oil and Gas or Deep Geothermal Locations.

The Energy and Carbon Management Act and the Geothermal Resources Act provide 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.

Does the Relevant Local Government regulate the siting of Oil and Gas and Deep Geothermal 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: 07/25/2023

Comments: Mesa County, the local government with jurisdiction over the siting of this oil and gas location, determined that 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. Currier BCU 0993-16-07 well pad meets all the Mesa County zoning setback requirements for the AFT zone district. Advance Notice was sent to Mesa County's Community Development Department, notifying Mesa County of Laramie's intentions to submit an Oil and Gas Development Plan to the Commission. The notification included details regarding proposed operations at the Currier BCU 0993-16-07. The notice letter was sent on June 14, 2023, to Mesa County pursuant to ECMC Rule 302.e. The letter was received by Mesa County on June 20, 2023. While Oil and Gas Drilling is an allowed use, Oil and Gas Locations must be permitted within Mesa County. Laramie submitted an Oil and Gas Location Application to Mesa County on June 28, 2023. The Land Development Application Public Notice sign for the application was posted on the subject parcel, at the entrance to the Currier BCU 0993-16-07, on July 10th, 2023. The Mesa County Community Development Planning Division issued the Oil and Gas Site Location Approval Document (PRO2023-0191) on July 25, 2023. Representatives from Mesa County's Community Development Department attended the Pre-Application Onsite Meeting on June 12, 2023.

GEOTHERMAL

Well Overview

The following questions determine informational requirements based on Well type:

Which type of Geothermal Well is this? Select one of the following:

Will this well be constructed using cementing methodologies other than those listed in Rule 408.f?

If Yes, what method will be used:

Please describe the cementing method to be used in detail:

Geothermal Resource Units

Fill out the information below to submit an application for a Geothermal Resource Unit (GRU) as part of the current permit application. This may also be completed later using a Form 4 Sundry.

Will this Well be in an existing GRU?

Are you submitting your application for a new GRU as part of the current application?

SURFACE AND MINERAL OWNERSHIP AT WELL'S OIL & GAS OR DEEP GEOTHERMAL LOCATION

Surface Owner of the land at this Well's Oil and Gas Or Deep Geothermal Location: Fee State Federal Indian

Mineral Owner beneath this Well's Oil and Gas Or Deep Geothermal 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.
 Carl V. Barnard et ux. (Laramie Lease CO002.0010) Township 9 South, Range 93 West, 6th P.M. SEC 16:
 SEC 9: SE/4SW/4, SW/4SE/4
 SEC 15: W/2SW/4
 SEC 16: N/2, SE/4SW/4, SE/4
 SEC 17: SE/4NE/4
 SEC 21: E/2NE/4
 SEC 22: W/2NW/4

Total Acres in Described Lease: 880 Described Mineral Lease is: Fee State Federal Indian
 Federal or State Lease # _____

SAFETY SETBACK INFORMATION

Distance from Well to nearest:

Building: 3340 Feet
 Building Unit: 3489 Feet
 Public Road: 3117 Feet
 Above Ground Utility: 2200 Feet
 Railroad: 5280 Feet
 Property Line: 1111 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

<u>Objective Formation(s)</u>	<u>Formation Code</u>	<u>Spacing Order Number(s)</u>	<u>Unit Acreage Assigned to Well</u>	<u>Unit Configuration (N/2, SE/4, etc.)</u>
WILLIAMS FORK-ILES	WFILS	1-229		

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? No

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: _____ 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: _____ Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: 155 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: 765 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: 9067 Feet TVD at Proposed Total Measured Depth 8653 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	90	120	90	0
SURF	11	8+5/8	J-55	24	0	1500	352	1500	0
1ST	7+7/8	4+1/2	HCP110	11.6	0	9067	1250	9067	

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	Freshwater/Groundwater	0	0	600	600	501-1000	DWR	Hayward ranch water well domestic – stock & irrigation
Confining Layer	Wasatch	600	600	2880	2707			
Hydrocarbon	Wasatch 'G' Sand	2880	2707	3376	3156	1001-10000	Other	Wasatch Producers Sec 5 & Sec 9 & Sec 15 T6S, R97W API: 5045200130001, 05045200230000, 05045106860000 (11/12/2020) (TDS: 760-2,050 mg/L. Fluid Present: Saltwater
Hydrocarbon	Fort Union	3376	3156	4235	3934			Potential Hazard: Instability
Hydrocarbon	Lower Wasatch	4235	3934	5037	4660			Fluid Present: Saltwater
Hydrocarbon	Ohio Creek	5037	4660	5478	5074	>10000	Produced Water Sample	Wells API# 05077087650000 Buzzard Creek 22-3 Potential Hazard: Loss circulation; Fluid Present: Saltwater
Hydrocarbon	Williams Fork	5478	5074	6268	5854	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L
Hydrocarbon	Top of Gas	6268	5854	7531	7117	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L
Hydrocarbon	Cameo	7531	7117	8029	7615	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L
Hydrocarbon	Rollins	8029	7615	8559	8145	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L
Hydrocarbon	Cozzette	8559	8145	8721	8307	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L
Hydrocarbon	Corcoran	8721	8307	8892	8478	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L
Hydrocarbon	Mancos	8892	8478	9067	8653	>10000	Produced Water Sample	Sup & Shep 0993-25-16W. API# 05077105790000 McDaniel 2-1 API#05077093410000 Water TDS: 40,000 mg/L

OPERATOR COMMENTS AND SUBMITTAL

Comments

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>
Drilling/Completion Operations	Operator acknowledges the proximity of the listed wells. Operator assures that this offset list will be remediated per the Offset Well Evaluation and Hydraulic Fracturing Operator Guidance Document (option 4). Operator will submit a Form 42 ("OFFSET MITIGATION COMPLETED") stating that appropriate mitigation will be completed during the hydraulic stimulation of this well. This Form 42 shall be filed 48 hours prior to stimulation. Operator will monitor casing (surface and production) pressures during the entire stimulation treatment. If there is indication of communication between the stimulation treatment and an offset well, treatment will be stopped and ECMC Engineering notified. Stimulation shall not resume without explicit approval from ECMC Engineering. Within 60 days after stimulation is complete, a Form 4 Sundry shall be submitted for each offset well on this list describing how Option 4 work was completed and include a summary of the monitoring details. 077-08757 CURRIER FAMILY *16-3
Drilling/Completion Operations	1) Submit Form 42 electronically to ECMC 2 business days prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 2 business day spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 408.j. and provide cement coverage from TD to a minimum of 500' above Wasatch G Formation. Verify coverage with a cement bond log. 3) Operator shall comply with the most current revision of the Northwest Notification Policy.
Drilling/Completion Operations	Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 150 psig is observed or if there is evidence of communication, Operator must contact ECMC engineering for approval prior to stimulation. 2) Within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.
Construction	If conductors are preset, operator shall comply with Notice to Operators: Procedures for Preset Conductors (dated September 1, 2016).
Drilling/Completion Operations	Operator will log two (2) additional wells during the second 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 three wells logged.
Interim Reclamation	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
6 COAs	

Operator Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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

<u>Att Doc Num</u>	<u>Name</u>
2473396	MINERAL LEASE MAP
404366494	FORM 2 SUBMITTED
404372837	DIRECTIONAL DATA
404373513	DEVIATED DRILLING PLAN
404373514	DEVIATED DRILLING PLAN
404373515	DEVIATED DRILLING PLAN
404373535	SURFACE AGRMT/SURETY
404375790	WELL LOCATION PLAT
404377326	OffsetWellEvaluations Data
404419423	OFFSET WELL EVALUATION

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Removed Federal lease information from Spacing & Formations tab. Attached corrected Mineral Lease Map	10/23/2025
Permit	Added comment for explanation of Amended application to Submit tab per operator.	10/22/2025
Permit	Final Review Complete.	10/16/2025
OGLA	The Commission approved OGDG #485488 on January 24, 2024 for the Oil and Gas Location related to this Form 2. OGLA task passed.	10/16/2025
Engineer	NOTE: COA for cement coverage of production casing has changed from previously approved Form 2. Removed TOC for production casing cement tab, please follow COA for cement requirement. Well is within BMA area. 16 water wells within 1 mile, 47 water wells within 2 miles, deepest water well 400'. surface casing coverage suffice. 3 offset wells within 1500', Offset well evaluation completed. 1 well has bradenhead history now on BH plan. Emailed option 4 and cement requirement.	10/15/2025
Permit	Changed elevation to match plat Added Operator's Wellbore Integrity Contact Email per operator Changed offset Well within the same unit permitted or completed per operator Added Operator's OH Logging BMP Changed minimum distance from the Completed Zone of this Well to the Unit Boundary per operator Passed Permitting review	10/09/2025

Total: 6 comment(s)