

FORM
2A

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:

403325444

(SUBMITTED)

Date Received:

12/05/2023

Oil and Gas Location Assessment

This Oil and Gas Location Assessment is to be submitted to the ECMC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the ECMC website at <https://ecmc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

OGDP ID:

Expiration Date:

☒ New Location ☐ Refile ☐ Amend Existing Location # _____

If this Location assessment is a component of an Oil and Gas Development Plan (OGDP) application, enter the OGDP docket number(s).

| Docket Number | OGDP ID | OGDP Name |
|---------------|---------|-----------|
| 231200361 | | |

If this Location assessment is part of an approved Oil and Gas Development Plan, enter the OGDP ID number(s).

<No existing OGDP number provided>

CONSULTATION

- ☐ This location is included in a Comprehensive Area Plan (CAP). CAP ID # _____
- ☒ This Location or its associated new access road, utility, or Pipeline corridor meets Rule 309.e.(2).A, B, or C.
- ☐ This Location is within 2,640 feet of a GUDI or Type III Well per Rule 411.b.(4).
- ☐ This Location includes a Rule 309.e.(2).E variance request.
- ☐ This location includes a Rule 309.f.(1).A.ii. variance request.

Operator

Operator Number: 10433

Name: LARAMIE ENERGY LLC

Address: 1700 LINCOLN ST STE 3950

City: DENVER State: CO Zip: 80203

Contact Information

Name: Katy Middleton

Phone: (970) 985-8240

Fax: ()

email: kmiddleton@laramie-energy.com

FINANCIAL ASSURANCE FOR THIS LOCATION (check all that apply)

- ☒ Plugging, Abandonment, and Reclamation 20210135
- ☐ Centralized E&P Waste Management Facility _____
- ☐ Gas Gathering, Gas Processing, and Underground Gas Storage Facilities _____
- ☐ Surface Owner Protection Bond. _____

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 one or more Wells on this Location.

Amount of Federal Financial Assurance \$ 25000

LOCATION IDENTIFICATION

Name: Laramie

Number: 0993-29-01

Provide the location description and the latitude and longitude of a single point near the center of the Working Pad Surface as a reference for this Location.

Quarter: NENE Section: 29 Township: 9S Range: 93W Meridian: 6 Ground Elevation: 7463
Latitude: 39.254781 Longitude: -107.784158
GPS Quality Value: 1.4 Type of GPS Quality Value: PDOP Date of Measurement: 08/10/2023

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is: LOCATION ID # FORM 2A DOC #

RELEVANT LOCAL GOVERNMENT SITING INFORMATION

County: MESA Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "Relevant Local Government approval of the siting of the proposed oil and gas location."

This proposed Oil and Gas Location is in an area designated as one of State interest and subject to the requirements of § 24-65.1-108, C.R.S. No

Does the Relevant Local Government regulate the siting of Oil and Gas Locations, with respect to this location? Yes

A siting permit application has been submitted to the Relevant Local Government for this proposed Oil and Gas Location: Yes

Date Relevant Local Government permit application submitted: 09/18/2023

Current status or disposition of the Relevant Local Government permit application for this proposed Oil and Gas Location: Approved

Status/disposition date: 10/18/2023

If Relevant Local Government permit has been approved or denied, attach final decision document(s).

Provide the contact information for the Relevant Local Government point of contact for the local permit associated with this proposed Oil and Gas Location:

Contact Name: Jeff Hofman

Contact Phone: 970.254.4152

Contact Email: Jeff.hofman@mesacounty.us

PROXIMATE LOCAL GOVERNMENT INFORMATION

For every Proximate Local Government (PLG) associated with this proposed Oil and Gas Location, provide the PLG's point of contact and their contact information.

< No row provided >

FEDERAL PERMIT INFORMATION

A Federal drilling permit (or related siting application) has been submitted for this proposed Oil and Gas Location: Yes

Date submitted: 10/25/2023

Current status or disposition of the Federal drilling permit (or related siting application) for this proposed Oil and Gas Location: Concurrent/Pending

Status/disposition Date: 11/27/2023

If Federal agency permit has been approved or denied, attach the final decision document(s).

Provide the contact information of the Federal point of contact for the Federal permit associated with this proposed Oil and Gas Location.

Contact Name: Wesley Toews

Contact Phone: 970.876.9067

Contact Email: wtoews@blm.gov

Field Office: Colorado River Valley Field Office - Silt

Additional explanation of local and/or federal process:

The 8 Federal APDs were submitted on 102523. Please refer to the BLM Consultation Summary, attached to this Form 2A, for more details. At time of Form 2A submittal, the Federal APDs are being reviewed. The Mesa County permit was approved 101823. Mesa County did not receive any public comments during the public notice period. Please see LDG Consultation Summary & Local Permit attachments for details. Both the BLM & Mesa County representatives attended pre-application onsite during the summer of 2023.

RELEVANT LOCAL GOVERNMENT OR FEDERAL PRE-APPLICATION CONSULTATION

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Did a pre-application Formal Consultation Process occur with the Relevant Local Government per Rule 301.f.(3)? Yes

Date of local government consultation: 06/12/2023

Did a pre-application Formal Consultation Process occur with the Federal land manager per Rule 301.f.(3)? Yes

Date of federal consultation: 06/01/2023

Was an ALA that satisfies Rule 304.b.(2).C (or substantially equivalent information per Rule 304.e) developed during a federal or local government permit application process? If yes, attach the ALA to the Form 2A. Yes

ALA APPLICABILITY AND CRITERIA

Complete this section for any pre-application consultation related to this proposed Oil and Gas Location that occurred prior to the submission of this Form 2A. If a pre-application Formal Consultation Process occurred, attach a Consultation Summary.

Does the proposed Oil and Gas Location meet any of the criteria listed in Rule 304.b.(2)B? Yes

If YES, indicate by checking the box for every Rule 304.b.(2).B criterion met by this proposed Location, and attach an ALA. See Rule 304.b.(2).B.i-x for full text of criteria.

- | | |
|---|---|
| <input type="checkbox"/> i. WPS < 2,000 feet from RBU/HOBU | <input type="checkbox"/> vi.aa. WPS within a surface water supply area |
| <input type="checkbox"/> ii. WPS < 2,000 feet from School/Child Care Center | <input type="checkbox"/> vi.bb. WPS < 2,640 feet from Type III or GUDI well |
| <input type="checkbox"/> iii. WPS < 1,500 feet from DOAA | <input checked="" type="checkbox"/> vii. WPS within/immediately upgradient of wetland/riparian corridor |
| <input type="checkbox"/> iv. WPS < 2,000 feet from jurisdictional boundary and PLG objects/requests ALA | <input checked="" type="checkbox"/> viii. WPS within HPH and CPW did not waive |
| <input type="checkbox"/> v. WPS within a Floodplain | <input type="checkbox"/> ix. Operator using Surface bond |
| | <input type="checkbox"/> x. WPS < 2,000 feet from RBU/HOBU/School within a DIC |

Is the proposed Oil and Gas Location within the exterior boundaries of the Southern Ute Indian Reservation, and the Tribe objects to the Location or requests an ALA? If YES, attach an ALA to the Form 2A. No

Operator requests the Director waive the ALA requirement per Rule 304.b.(2).A.i: ☐

Provide an explanation for the waiver request, and attach supporting information (if necessary).

ALTERNATIVE LOCATIONS DASHBOARD

List every alternative location reviewed and included in the ALA. Provide a latitude and longitude for the approximate center of the alternative location, all Rule 304.b.(2).B Criteria met, if a variance would be required to permit the location, and a brief comment on the key points of the alternative location.

304.b.(2).B.i-x Criteria Met:

| # | latitude | longitude | i | ii | iii | iv | v | vi | vii | viii | ix | x | Variance Required? | Comments |
|---|-----------|-------------|---|----|-----|----|---|----|-----|------|----|---|-----------------------|---|
| | 39.260578 | -107.784774 | | | | | | | | | | | | AL 3 is a Tier I-A. AL 3 would result in 12 acres of disturbance, including 1.3 acres of HPH disturbance (Elk Winter Concentration). Due to the varying topography and steep terrain, AL 3 would require significant cut and fills to construct well pad. AL 3 would result in 12 acres of disturbance. During preliminary assessment of the location, a consultant advised Laramie to pursue an alternative location or conduct further geo-technical testing to determine if AL 3 could be constructed. |
| | 39.256718 | -107.785781 | | | | | | | | | | | | AL 4 is a Tier I-A. AL 4 would result in 11 acres of disturbance, including 1.3 acres of HPH disturbance (Elk Winter Concentration). The well pad would be constructed on all new, undisturbed surface. Topography and mapped geologic landslide hazards posed challenges in developing AL 4. AL 4 is within a mapped geologic landslides hazards area. AL 4 could reach all minerals targeted in the OGDG. |
| | 39.254909 | -107.780201 | | | | | | | | | | | | AL 5 is a Tier I-B. AL 5 would result in 10.5 acres of disturbance, including 1.1 acres of HPH disturbance (Elk Winter Concentration). AL 5 was eliminated since all the targeted bottom hole locations could not be reached from the location and the well pad would be constructed at the base of a ridge. Due to the topography of site, deep cuts and increased surface disturbance would result. Potential destabilization of the hillside could result due to significant cuts. |
| | 39.260736 | -107.795992 | | | | | | | x | | | | | AL 1 is a Tier II-B. The AL was originally to be developed with AL 2 for a larger mineral development area. AL 1 would result in 13 acres of disturbance, including 1 acre of HPH disturbance (aquatic). Laramie eliminated AL1 due to geologic landslide hazards and increased surface disturbance. All the OGDG targeted minerals could not be reached from AL 1. |

[illegible]

SURFACE & MINERAL OWNERSHIP

Surface Owner Info:

Name: Jerry Gunderson

Address: 1137 19 Rd

Address:

City: Fruita

Name: Laramie Energy, LLC

Address: 1700 Lincoln Street

Address: Suite 3950

City: Denver

Surface Owner at this Oil and Gas Location:

Check only one:

☐ The Operator has a signed Surface Use Agreement for this Location – attach SUA.

☐ All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the surface owner owns the minerals beneath this Location and is committed to an oil and gas lease – attach lease map or provide lease description.

☐ All operations on this Oil & Gas Location will develop the minerals beneath the Location, and the Operator intends to use a surface bond per Rule 703 to secure access to this Location – attach lease map or provide lease description.

Operator intends to use a surface bond per Rule 705 to secure access to this Location – attach lease map or provide lease description.

Surface Owner protection Financial Assurance type: N/A

Mineral Owner beneath this Oil and Gas Location:

Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: No

Lease description if necessary: See Mineral Lease Map

SITE EQUIPMENT LIST

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

Wells 16

| | |
|---------------|---|
| Drilling Pits | 0 |
|---------------|---|

| | |
|------------|---|
| Pump Jacks | 0 |
|------------|---|

| | |
|----------------------|---|
| Gas or Diesel Motors | 0 |
|----------------------|---|

Dehydrator Units 0

OTHER PERMANENT EQUIPMENT

| Permanent Equipment Type | Number |
|-------------------------------------|--------|
| Chemical Storage Unit -330 gal each | 3 |
| GUNBARREL TANKS (400 bbl each) | 2 |
| Routed pneumatic controllers | 68 |
| Thermoelectric generator | 1 |
| Knockout pump | 1 |
| Gas Scrubber | 4 |
| Heat exchanger with burner | 4 |

OTHER TEMPORARY EQUIPMENT

| Temporary Equipment Type | Number |
|------------------------------------|--------|
| Generators | 3 |
| Freshwater storage tanks (400 bbl) | 4 |
| Mud Tanks (600 bbl total) | 8 |
| Charge Pump/Blender (100 gal) | 1 |
| Frac Pump (diesel) (230 gal each) | 12 |
| Frac Tanks (550 bbl each) | 80 |

GAS GATHERING COMMITMENT

Operator commits to connecting to a gathering system by the Commencement of Production Operations? Yes

If the answer is NO, a Gas Capture Plan consistent with the requirements of Rule 903.e MUST be attached on the Plans tab.

FLOWLINE DESCRIPTION

Per Rule 304.b.(6), provide a description of all onsite and off-location oil, gas, and/or water flowlines.

Each well (16 wells proposed) will have a flowline that is connected to a separator within the WPS. A 2-inch fusion bonded epoxy (FBE) coated carbon steel flowline will start at each of the 16 wellheads and connect to the separators. The FBE coating is non-toxic, and the FBE coated carbon steel flowline is resistant to corrosion. Laramie will also install sacrificial anodes on the flowlines to provide cathodic protection providing further resistance to corrosion. The produced water/condensate dumlplines from the separators to the tanks will consist of 2-, 3-, or 4-inch steel above ground transitioning to an underground Flexpipe or Flexsteel. The below ground Flexpipe or Flexsteel will be either 3-inch or 4-inch (determination will be made during the drilling phase). Additional details are provided in the Plan of Development, attached to the Form 2A as "Other".

CULTURAL DISTANCE AND DIRECTION

Provide the distance and direction to the nearest cultural feature as measured from the edge of the Working Pad Surface.

| | | | | Rule 604.b Conditions Satisfied (check all that apply): | | | | | |
|------------------------------------|-----------|--|-----------|--|--------------------------|--------------------------|-------------------------|--------------------------|--|
| | Distance | | Direction | 604.b. (1) | 604.b. (2) | 604.b. (3) | Details of Condition(s) | 604.b. (4) | |
| Building: | 1243 Feet | | SW | | | | | | |
| Residential Building Unit (RBU): | 5280 Feet | | N | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | |
| High Occupancy Building Unit(HOBU) | 5280 Feet | | W | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | |
| Designated Outside Activity Area: | 5280 Feet | | S | | | | | | |
| Public Road: | 4858 Feet | | N | | | | | | |
| Above Ground Utility: | 955 Feet | | W | | | | | | |
| Railroad: | 5280 Feet | | N | | | | | | |
| Property Line: | 20 Feet | | W | | | | | | |

School Facility: 5280 Feet W
Child Care Center: 5280 Feet W
Disproportionately Impacted (DI) Community: 0 Feet W
RBU, HOBu, or School Facility within a DI Community: 5280 Feet N ☐ ☐ ☐

RULE 604.a.(2). EXCEPTION LOCATION REQUEST

☐ Operator requests an Exception Location Request from Rule 604.a.(2) [well is less than 150 feet from a property line]. Exception Location Request Letter and Waiver signed by offset Surface Owner(s) must be attached.

CULTURAL FEATURE INFORMATION REQUIRED BY RULE 304.b.(3).B.

Provide the number of each Cultural feature identified within the following distances, as measured from the Working Pad Surface:

| | 0-500 feet | 501-1,000 feet | 1,001-2,000 feet |
|-----------------------------------|------------|----------------|------------------|
| Building Units | 0 | 0 | 0 |
| Residential Building Units | 0 | 0 | 0 |
| High Occupancy Building Units | 0 | 0 | 0 |
| School Properties | 0 | 0 | 0 |
| School Facilities | 0 | 0 | 0 |
| Designated Outside Activity Areas | 0 | 0 | 0 |

CONSTRUCTION

Size of disturbed area during construction in acres: 9.40

Size of location after interim reclamation in acres: 2.20

Estimated post-construction ground elevation: 7463

DRILLING PROGRAM

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 H2S Drilling Operations Plan.

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

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Drill cuttings will be managed/buried onsite. Drilling fluids will be recycled and reused at the Laramie 0993-29-01 and subsequent drilling operations at the next well pad Laramie drills. Please see the Waste Management Plan for details.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

CURRENT LAND USE

Current Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)
Non-Crop Land: ☒ Rangeland ☐ Forestry ☐ Recreation ☐ Other
Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Describe the current land use:

The surface lands are privately owned. The WPS, buried pipeline Right-of-Way, temporary surface line, and access road will be constructed on Laramie owned surface. A small portion of the Area of Disturbance will be located on the adjacent parcel. Of the 9.4 acres of short-term disturbance, 3.7 acres was previously disturbed due to Oil & Gas activities. Proposed well pad is adjacent to existing O&G well pads and support facilities.

Describe the Relevant Local Government's land use or zoning designation:

The Laramie 0993-29-01 is located on private lands (Fee surface) in Mesa County, Colorado. Mesa County defines the subject parcel as the Agricultural, Forestry, Transitional (AFT) zone district. Adjacent parcels are zoned AFT. Existing use of adjacent properties and neighboring area are public lands, rangelands, and recreational use. Natural resources extraction and support facilities exist in the surrounding area.

Describe any applicable Federal land use designation:

The Laramie 0993-29-01 is located on private lands (Fee surface) in Mesa County, Colorado.

FINAL LAND USE

Final Land Use: check all that apply per Rule 304.b.(9).

Crop Land: ☐ Irrigated ☐ Non-Irrigated ☐ Conservation Reserve Program (CRP)
Non-Crop Land: ☒ Rangeland ☐ Forestry ☐ Recreation ☐ Other
Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

REFERENCE AREA INFORMATION

If Final Land Use includes Non-Crop Land (as checked above), the following information is required:

Describe landowner's designated final land use(s):

The designated final land use will be non-crop rangeland.

Reference Area Latitude: 39.254690

Reference Area Latitude: -107.781923

Provide a list of plant communities and dominant vegetation found in the Reference Area.

| Plant Community | Dominant vegetation |
|-----------------|---|
| Shrub Land | serviceberry (Amelanchier utahensis) |
| Shrub Land | western wheatgrass (Pascopyrum smithii) |
| Shrub Land | mountain sagebrush (Artemisia tridentata ssp. vaseyana) |
| Shrub Land | Gambel oak (Quercus gambelii) |
| Shrub Land | intermediate wheatgrass (Thinopyrum intermedium) |

Noxious weeds present: Yes

SOILS

List all soil map units that occur within the maximum extent of the proposed Oil and Gas Location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" listing the typical vertical soil profile(s). This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS website at <https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/> or from the ECMC website GIS Online map page. Instructions are provided within the ECMC website help section.

NRCS Map Unit Name: Fughes-Hesperus complex, 3 to 12 percent slopes (NRCS Map Unit 39)

NRCS Map Unit Name: Hesperus-Empedrado, moist-Pagoda complex 5 to 35 percent slopes (NRCS Map Unit 47)

NRCS Map Unit Name: _____

GROUNDWATER AND WATER WELL INFORMATION

Provide the distance and direction, as measured from the Working Pad Surface, to the nearest:

water well: 1344 Feet SW

Spring or Seep: 433 Feet SE

Estimated depth to shallowest groundwater that can be encountered at this Oil and Gas Location: 100 Feet

Basis for estimated depth to and description of shallowest groundwater occurrence:

State Engineer's Office and USGS records were reviewed to gather additional information pertaining to the occurrence and depth of shallow groundwater. There is 1 permitted domestic water well, Permit No. 306397 located 1,344 feet 222°SW from the proposed pad and at elevation of 7433 feet and is adjacent to Groundhog Gulch. Well completion depth is 72 feet with a total drilled depth of 80 feet. Shallow groundwater occurrence is limited to alluvial aquifers adjacent to surface water and is not representative of the hard rock sandstone hydrogeology of the proposed site. The pad is not underlain by an unconfined aquifer or recharge zone. Hydrophytic vegetation indicative of shallow groundwater conditions does not occur at the pad estimated to be greater than 100 feet.

SURFACE WATER AND WETLANDS

Provide the distance and direction to the nearest downgradient surface Waters of the State, as defined 696 Feet S

in the 100-Series Rules, measured from the Working Pad Surface:

If less than 2,640 feet, is the Waters of the State identified above within 15 stream miles upstream of a Public Water

System intake? No

Provide the distance and direction to the nearest downgradient wetland, measured from the Working

Pad Surface: 889 Feet W

Provide a description of the nearest downgradient surface Waters of the State:

The nearest Waters of the State, is the field-verified dry ephemeral channel, located 696 feet south of the WPS. The nearest downgradient wetlands, based on surface hydrologic flow, is 889 feet west of the WPS and exists along Groundhog Gulch perennial stream. The seep & wetland vegetation located 433 feet southeast of the WPS is not downgradient of the pad and there is no surface connectivity between the pad and the seep; however, this seep is adjacent to the proposed access road.

If the proposed Oil and Gas Location is within a Rule 411.a Surface Water Supply Area buffer zone, select the buffer zone type: _____

Public Water System Administrator - Contact Name _____ Email _____

If the proposed Oil and Gas Location is within a Rule 411.b GUDI/Type III buffer zone, select the buffer zone type: _____

Public Water System Administrator - Contact Name _____ Email _____

Is a U.S. Army Corps of Engineers Section 404 permit required for the proposed Oil and Gas Location, access road, or associated pipeline corridor? No

If a U.S. Army Corps of Engineers Section 404 permit is required, provide the permit status, and permit number if available:

Is the Location within a Floodplain? No Floodplain Data Sources Reviewed (check all that apply):

☒ Federal (FEMA) ☐ State ☐ County ☐ Local

☐ Other

Does this proposed Oil and Gas Location lie within a Sensitive Area for water resources, as defined in the 100-Series Rules? No

CONSULTATION, WAIVERS, AND EXCEPTIONS

When Rule 309.e.(2) Consultation must occur, check all that apply:

- ☒ This location is included in a Wildlife Mitigation Plan
- ☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within federally designated critical habitat or an area with a known occurrence for a federal or Colorado threatened or endangered species. Provide description in Comments section of Submit tab.
- ☐ This Oil and Gas Location or associated new access road, utility, or pipeline corridor falls within an existing conservation easement established wholly or partly for wildlife habitat. Provide description in Comments section of Submit tab.

When Rule 309.e.(3) Consultation is not required, check all that apply:

- ☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Protection Plan.
- ☐ This Oil and Gas Location has been included in a previously approved, applicable Wildlife Mitigation Plan.
- ☐ This Oil and Gas Location has been included in a previously approved, applicable conservation plan.

Pre-application Consultation:

- ☒ A pre-application consultation with CPW, regarding this Oil and Gas Location, occurred 05/03/2023 on:

CPW Waivers and Exceptions (check all that apply and attach all CPW waivers to this Form 2A):

- ☐ The applicant has obtained a Rule 304.b.(2).B.viii CPW waiver for the requirement to complete an ALA.
- ☐ The applicant has obtained a Rule 309.e.(2).G CPW waiver and consultation is not required.
- ☐ The applicant has obtained a Rule 309.e.(5).D.i CPW waiver and is requesting an exception from Rule 1202.c.(1).R.
- ☐ The applicant has obtained a Rule 309.e.(5).D.ii CPW waiver and is requesting an exception from Rule 1202.c.(1).S.
- ☐ The applicant has obtained a Rule 309.e.(5).D.iii CPW waiver of Rule 1202.c.(1).T.
- ☐ The applicant has obtained a Rule 309.e.(5).D.iv CPW waiver and is requesting an exception from Rule 1202.c.(1) in accordance with an approved CAP.
- ☒ The applicant has obtained a Rule 1202.a CPW waiver.
- ☐ The applicant has obtained a Rule 1202.b CPW waiver.
- ☐ In accordance with Rule 1203.a.(3), the applicant requests an exception from compensatory mitigation Rule(s):

HIGH PRIORITY HABITAT AND COMPENSATORY MITIGATION

This Oil and Gas Location, associated access roads, utility, or Pipeline corridor falls wholly or partially within the following High Priority Habitats (Note: dropdown options are abbreviated - see Rule 1202 for full rule text):

| High Priority Habitat (list all that apply) | Oil and Gas Location | Access Road | Utility or Pipeline Corridor |
|---|----------------------|-------------|------------------------------|
| 1202.d.(2) - Elk migration & winter | x | x | x |

The following questions are for Oil and Gas Locations that cause the density to exceed one Oil and Gas Location per square mile in Rule 1202.d High Priority Habitat:

Direct Impacts:

Is Compensatory Mitigation required per Rule 1203.a for this Oil and Gas Location? Yes

Is a Compensatory Mitigation Plan proposed to address direct impacts for this Oil and Gas Location? Yes

Have all Compensatory Mitigation Plans been approved for this Location? Yes

If not, what is the current status of each Plan?

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? Yes

Direct impact habitat mitigation fee amount: \$ 13750

Indirect Impacts:

Is Compensatory Mitigation required per Rule 1203.d for this Oil and Gas Location? Yes

Is a Compensatory Mitigation Plan proposed to address indirect impacts for this Oil and Gas Location? Yes

Have all Compensatory Mitigation Plans been approved for this Location? Yes

If not, what is the current status of each Plan?

Is a Compensatory Mitigation Fee proposed for this Oil and Gas Location? Yes

Indirect impact habitat mitigation fee amount: \$ 48164.55

Operator Proposed Wildlife BMPs

No BMP

AIR QUALITY MONITORING PROGRAM

Will the Operator install and administer an air quality monitoring program at this Location? Yes

| Operator Proposed BMPs | | |
|------------------------|---------------|---|
| No | BMP Target | CDPHE Recommendation |
| | Air | |
| | Description | Laramie will have adequate and committed pipeline take away capacity for all produced gas. Oil will be transported from the facility by truck load out. All load outs will occur via submerged fill. As these are natural gas wells and produce very small volumes of condensate, an oil pipeline is not warranted. Approximately two truck loads of condensate per month is anticipated based on production from an adjacent well pad. |
| | CDPHE Comment | |
| | Water | |

| | | |
|---------------|--|--|
| Description | Documentation / stormwater management plan: If it is infeasible to install or repair a control measure immediately after discovering a deficiency, operator will document and keep on record in the stormwater management plan: (a) a description of why it is infeasible to initiate the installation or repair immediately; and (b) a schedule for installing or repairing the control measure and returning it to an effective operating condition as soon as possible. | |
| CDPHE Comment | | |
| Water | | |
| Description | Stormwater inspections: Operator will conduct weekly stormwater inspections during normal operations. CDPHE North Vega Project Area Certification to Discharge Permit # COR402698 ; North Vega Storm Water Management Plan. "At least one inspection every 7 calendar days. Or, at least one inspection every 14 calendar days, if post-storm event inspections are conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion. Post-storm inspections." | |
| CDPHE Comment | | |
| Air | | |
| Description | Pipelines: During pipeline downtime, wells onsite will be shut-in. | |
| CDPHE Comment | | |
| Water | | |
| Description | CPGCC permit will incorporate other agency water quality protection plans by reference as applicable (e.g. stormwater management plan) | |
| CDPHE Comment | | |
| Waste | | |
| Description | Operator will properly characterize and dispose of all waste (i.e. the specific landfill/waste disposal location allows for acceptance of the waste stream) | |
| CDPHE Comment | | |
| Air | | |
| Description | Pipelines: Operator will use pipelines to transport water for hydraulic fracturing to and from location | |
| CDPHE Comment | | |
| Air | | |
| Description | Pipelines: Operator will shut in the facility to reduce the need for flaring if the pipeline is unavailable | |
| CDPHE Comment | | |
| Air | | |
| Description | Operator will implement ambient air quality monitoring on site | |
| CDPHE Comment | | |
| Water | | |
| Description | Dust suppression: Operator will not use produced water or other process fluids for dust suppression | |
| CDPHE Comment | | |
| Air | | |
| Description | Venting/Flaring: Operator will control emergency flaring with an enclosed combustor with a design destruction efficiency of 98% or better and an actual destruction efficiency of 95% or better. | |
| CDPHE Comment | | |
| Waste | | |
| Description | Operator will properly test for and dispose of TENORM | |
| CDPHE Comment | | |

| | | |
|---------------|---|--|
| Air | | |
| Description | Venting/Flaring: Operator will control bradenhead/casinghead venting | |
| CDPHE Comment | | |
| Air | | |
| Description | Operator will use fresh water-based drilling fluid with zero oil. | |
| CDPHE Comment | | |
| Air | | |
| Description | Operator will properly maintain vehicles and equipment | |
| CDPHE Comment | | |
| Water | | |
| Description | Stormwater inspections: Operator will conduct stormwater inspections immediately after storm event. CDPHE North Vega Project Area Certification to Discharge Permit # COR402698: North Vega Storm Water Management Plan. Laramie commits to "All BMPs will be inspected within 24 hours of the conclusion of any precipitation event or snowmelt event that causes surface erosion. If ROW conditions do not allow for timely, post-storm inspection of BMPs, the inspection will take place within 72 hours of the event and prior to the re-commencing of construction activities." | |
| CDPHE Comment | | |
| Water | | |
| Description | Stream crossing and Road Construction: Operator will ensure that control measures are designed, installed and adequately sized in accordance with good engineering, hydrologic and pollution control practices | |
| CDPHE Comment | | |
| Air | | |
| Description | Operator will use non-emitting pneumatic controllers | |
| CDPHE Comment | | |
| Air | | |
| Description | Odor mitigation: operator will use a squeegee or other device to remove drilling fluids from pipes as they exit the wellbore | |
| CDPHE Comment | | |
| Air | | |
| Description | Venting/Flaring: Operator will not flare or vent gas during completion or flowback, except in upset or emergency conditions, or with prior written approval from the Director for necessary maintenance operations | |
| CDPHE Comment | | |
| Water | | |
| Description | Outfall locations: Outlet protection should be used when a conveyance discharges onto a disturbed area where there is potential for accelerated erosion due to concentrated flow. Outlet protection should be provided where the velocity at the culvert outlet exceeds the maximum permissible velocity of the material in the receiving channel. | |
| CDPHE Comment | | |
| Air | | |
| Description | Odor mitigation: Operator will ensure that all drilling fluid is removed from pipes before storage | |
| CDPHE Comment | | |
| Water | | |
| Description | Down gradient controls: Operator will install adequate down gradient controls if they can not have a control at the source | |

| | | |
|--|---------------|--|
| | CDPHE Comment | |
| | Water | |
| | Description | Vehicle fueling: Operator will ensure that a fueling contractor is present during the entire fueling process to prevent overfilling, leaks and drips from improper connections |
| | CDPHE Comment | |

PLANS

Total Plans 14
 Uploaded:

- ☐ (1) Emergency Spill Response Program consistent with the requirements of Rules 411.a.(4).B, 411.b.(5).B, & 602.j
- ☒ (2) Noise Mitigation Plan consistent with the requirements of Rule 423.a
- ☒ (3) Light Mitigation Plan consistent with the requirements of Rule 424.a
- ☐ (4) Odor Mitigation Plan consistent with the requirements of Rule 426.a
- ☒ (5) Dust Mitigation Plan consistent with the requirements of Rule 427.a
- ☐ (6) Transportation Plan
- ☒ (7) Operations Safety Management Program consistent with the requirements of Rule 602.d
- ☒ (8) Emergency Response Plan consistent with the requirements of Rule 602.j
- ☐ (9) Flood Shut-In Plan consistent with the requirements of Rule 421.b.(1)
- ☐ (10) Hydrogen Sulfide Drilling Operations Plan consistent with the requirements of Rule 612.d
- ☒ (11) Waste Management Plan consistent with the requirements of Rule 905.a.(4)
- ☐ (12) Gas Capture Plan consistent with the requirements of Rule 903.e
- ☒ (13) Fluid Leak Detection Plan
- ☒ (14) Topsoil Protection Plan consistent with the requirements of Rule 1002.c
- ☒ (15) Stormwater Management Plan consistent with the requirements of Rule 1002.f
- ☒ (16) Interim Reclamation Plan consistent with the requirements of Rule 1003
- ☒ (17) Wildlife Plan consistent with the requirements of Rule 1201
- ☒ (18) Water Plan
- ☒ (19) Cumulative Impacts Plan
- ☐ (20) Community Outreach Plan
- ☒ (21) Geologic Hazard Plan

VARIANCE REQUESTS

Check all that apply:

- ☐ This proposed Oil and Gas Location requires the approval of a Rule 502.a variance from ECMC Rule or Commission
- Order number: _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

RULE 304.d LESSER IMPACT AREA EXEMPTION REQUESTS

Check the boxes below for all Exemptions being requested. Lesser Impact Area Exemption Request must be attached, and will include all requested exemptions.

- | | |
|--|--|
| <input type="checkbox"/> 304.b.(1). Local Government Siting Information | <input type="checkbox"/> 304.c.(1). Emergency Spill Response Program |
| <input type="checkbox"/> 304.b.(2). Alternative Location Analysis | <input type="checkbox"/> 304.c.(2). Noise Mitigation Plan |
| <input type="checkbox"/> 304.b.(3). Cultural Distances | <input type="checkbox"/> 304.c.(3). Light Mitigation Plan |
| <input type="checkbox"/> 304.b.(4). Location Pictures | <input type="checkbox"/> 304.c.(4). Odor Mitigation Plan |
| <input type="checkbox"/> 304.b.(5). Site Equipment List | <input type="checkbox"/> 304.c.(5). Dust Mitigation Plan |
| <input type="checkbox"/> 304.b.(6). Flowline Descriptions | <input type="checkbox"/> 304.c.(6). Transportation Plan |
| <input type="checkbox"/> 304.b.(7). Drawings | <input type="checkbox"/> 304.c.(7). Operations Safety Management Program |
| <input type="checkbox"/> 304.b.(8). Geographic Information System (GIS) Data | <input type="checkbox"/> 304.c.(8). Emergency Response Plan |
| <input type="checkbox"/> 304.b.(9). Land Use Description | <input type="checkbox"/> 304.c.(9). Flood Shut-In Plan |
| <input type="checkbox"/> 304.b.(10). NRCS Map Unit Description | <input type="checkbox"/> 304.c.(10). Hydrogen Sulfide Drilling Operations Plan |
| <input type="checkbox"/> 304.b.(11). Best Management Practices | <input type="checkbox"/> 304.c.(11). Waste Management Plan |
| <input type="checkbox"/> 304.b.(12). Surface Owner Information | <input type="checkbox"/> 304.c.(12). Gas Capture Plan |
| <input type="checkbox"/> 304.b.(13). Proximate Local Government | <input type="checkbox"/> 304.c.(13). Fluid Leak Detection Plan |
| <input type="checkbox"/> 304.b.(14). Wetlands | <input type="checkbox"/> 304.c.(14). Topsoil Protection Plan |
| <input type="checkbox"/> 304.b.(15). Schools and Child Care Centers | <input type="checkbox"/> 304.c.(15). Stormwater Management Plan |
| | <input type="checkbox"/> 304.c.(16). Interim Reclamation Plan |
| | <input type="checkbox"/> 304.c.(17). Wildlife Plan |
| | <input type="checkbox"/> 304.c.(18). Water Plan |
| | <input type="checkbox"/> 304.c.(19). Cumulative Impacts Plan |
| | <input type="checkbox"/> 304.c.(20). Community Outreach Plan |
| | <input type="checkbox"/> 304.c.(21). Geologic Hazard Plan |

OPERATOR COMMENTS AND SUBMITTAL

| | |
|----------|---|
| Comments | <p>A portion of the 2023 Laramie 0993-29-01 OGDG would be situated within mapped Elk Winter Concentration Habitat (ECMC Rule 1202.d.(2)). It should be noted that this habitat buffer is currently under review and, as part of CPW's 2024 Northwestern map layer revisions, CPW is proposing to remove this habitat.</p> <p>For details regarding applicability of ECMC 304.c. plans, please refer to the Plan of Development - attached to the Form 2A as "Other"</p> <p>The following ECMC Rule 304.c Plans are NOT required for this submittal:</p> <p>*ECMC Rule 304.c.(1) Emergency Spill Response Program: The Laramie 0993-29-01 is not located within surface water that is 15 miles or less upstream from a Public Water System(s) intake or within 2,640 feet of a groundwater under the direct influence of surface water well or Type III Well.</p> <p>*ECMC Rule 304.c.(4) An Odor Mitigation Plan is not required since there are no Buildings Units (RBUs or HOBUs), schools or child care centers within 2,000 ft of the WPS.</p> <p>*ECMC Rule 304.c.(6) A Transportation Plan is not required by the Relevant Local Government. Traffic projections for proposed operations at the Laramie 0993-29-01 are provided in the Plan of Development.</p> <p>*ECMC Rule 304.c.(9) Flood Shut-In Plan: Laramie 0993-29-01 is Not located within a floodplain.</p> <p>*ECMC Rule 304.c.(10) Hydrogen Sulfide Drilling Operations Plan: Will not be drilled into formations that historically contain H₂S. There is no known occurrences of Hydrogen Sulfide in the Mesaverde Group in the operations area.</p> <p>*ECMC Rule 304.c.(12) Gas Capture Plan: Operator is committed to a gathering system connection.</p> <p>*ECMC Rule 304.c.(20). Community Outreach Plan: There are no RBUs or HOBUs within 2,000 feet of the Laramie 0993-29-01.</p> |
|----------|---|

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

Signed: _____ Date: 12/05/2023 Email: kmiddleton@laramie-energy.com

Print Name: Katy Middleton Title: Sr. Permit & Env Planner

Based on the information provided herein, this Oil and Gas Location Assessment complies with ECMC Rules, applicable orders, and SB 19-181 and is hereby approved.

ECMC Approved: _____ Director of ECMC Date: _____

CONDITIONS OF APPROVAL, IF ANY LIST

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

0 COA

Best Management Practices

No BMP/COA Type

Description

ATTACHMENT LIST

| <u>Att Doc Num</u> | <u>Name</u> |
|---------------------------|-----------------------------------|
| 403599134 | ACCESS ROAD MAP |
| 403599139 | LOCATION AND WORKING PAD GIS SHP |
| 403599151 | CULTURAL FEATURES MAP |
| 403599165 | GEOLOGIC HAZARD MAP |
| 403599175 | MINERAL LEASE MAP |
| 403599177 | WILDLIFE HABITAT DRAWING |
| 403599179 | RELATED LOCATION AND FLOWLINE MAP |
| 403599188 | LOCATION DRAWING |
| 403599191 | LOCATION PICTURES |
| 403599210 | PRELIMINARY PROCESS FLOW DIAGRAMS |
| 403599213 | REFERENCE AREA MAP |
| 403599214 | REFERENCE AREA PICTURES |
| 403599218 | CONSULTATION SUMMARY |
| 403599234 | LOCAL/FED FINAL PERMIT DECISION |
| 403599237 | LGD CONSULTATION |
| 403599516 | SURFACE AGRMT/SURETY |
| 403614305 | ALA NARRATIVE SUMMARY |
| 403614342 | ALA DATASHEET |
| 403692495 | NRCS MAP UNIT DESC |
| 403695262 | LAYOUT DRAWING |
| 403695264 | DIRECTIONAL WELL PLAT |
| 403695313 | OTHER |
| 403695676 | CPW WAIVER |
| 403695679 | CPW CONSULTATION |
| 403695683 | HYDROLOGY MAP |

Total Attach: 25 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|--|----------------------------|
| OGLA | Returned to DRAFT for the following reasons: Datafield corrections. Attachment and Plan corrections. | 02/16/2024 |

Total: 1 comment(s)

Public Comments

No public comments were received on this application during the comment period.

