FORM 2A Rev 08/13

State of Colorado
Oil and Gas Conservation Commission

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

Oil and Gas Location Assessment

Document Number: 401180345 **(SUBMITTED)**

Date Received: 01/16/2017

☒ New Location ☐ Refile ☐ Amend Existing Location Location#:

This Oil and Gas Location Assessment is to be submitted to the COGCC 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 COGCC website at http://cogcc.state.co.us/ for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

Expiration Date:

☒ This location assessment is included as part of a permit application.

CONSULTATION

☐ This location is included in a Comprehensive Drilling Plan. CDP #
☒ This location is in a sensitive wildlife habitat area.
☐ This location is in a wildlife restricted surface occupancy area.
☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 10433
Name: LARAMIE ENERGY LLC
Address: 1401 SEVENTEENTH STREET #1400
City: DENVER State: CO Zip: 80202

Contact Information

Name: Joan Proulx
Phone: (970) 263-3641
Fax: ( )
email: jproulx@laramie-energy.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20120081
☐ Gas Facility Surety ID:
☐ Waste Management Surety ID:

LOCATION IDENTIFICATION

Name: Bruton Number: 30-01
County: MESA

QuarterQuarter: NENE Section: 30 Township: 9S Range: 93W Meridian: 6 Ground Elevation: 7425

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 10 feet FNL from North or South section line
1116 feet FEL from East or West section line

Latitude: 39.255294 Longitude: -107.806219

PDOP Reading: 1.4 Date of Measurement: 03/27/2015

Instrument Operator's Name: B Box

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 #
☐		

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	16	Oil Tanks*		Condensate Tanks*	8	Water Tanks*		Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks		Separators*	16	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*		Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*	1	Flare*		Pigging Station*	

OTHER FACILITIES*

Other Facility Type	Number

*Those facilities indicated by an asterisk (*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Flowlines from wellhead to separators and from separators to tank will be 2” steel buried 4’ below grade. The wells will be tied into the existing 10" steel gas gathering line with an 8" to 10" steel line buried along the access road. In addition, a 6" - 8" steel or poly water line will be buried in the same trench.

CONSTRUCTION

Date planned to commence construction: 03/24/2017 Size of disturbed area during construction in acres: 5.50

Estimated date that interim reclamation will begin: 08/01/2018 Size of location after interim reclamation in acres: 2.30

Estimated post-construction ground elevation: 7425

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H_2S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

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

Cutting Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Due to character limit (255), see submittal comments for Drilling Waste Management

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Eric T. Bruton Phone: 970-216-9068
Address: Box 42 Fax:
Address: Email: etbruton@gmail.com
City: Mesa State: CO Zip: 81643
Surface Owner: [X] Fee [ ] State [ ] Federal [ ] Indian
Check all that apply. The Surface Owner: [X] is the mineral owner
[X] is committed to an oil and Gas Lease
[X] has signed the Oil and Gas Lease
[ ] is the applicant

The Mineral Owner beneath this Oil and Gas Location is: [X] Fee [ ] State [ ] Federal [ ] Indian

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

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: Surface Surety ID:

Date of Rule 306 surface owner consultation 04/30/2015

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: [X] Irrigated [ ] Dry land [ ] Improved Pasture [ ] Hay Meadow [ ] CRP
Non-Crop Land: [ ] Rangeland [ ] Timber [ ] Recreational [ ] Other (describe):
Subdivided: [ ] Industrial [ ] Commercial [ ] Residential

Future Land Use (Check all that apply):

Crop Land: [X] Irrigated [ ] Dry land [ ] Improved Pasture [ ] Hay Meadow [ ] CRP
Non-Crop Land: [ ] Rangeland [ ] Timber [ ] Recreational [ ] Other (describe):
Subdivided: [ ] Industrial [ ] Commercial [ ] Residential

CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	4023 Feet	3896 Feet
Building Unit:	4154 Feet	4027 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	4954 Feet	4796 Feet
Above Ground Utility:	2008 Feet	1850 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	1116 Feet	977 Feet

INSTRUCTIONS:
- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- 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, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.
-For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:

- [ ] Buffer Zone
- [ ] Exception Zone
- [ ] Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.
- Large UMA Facility – as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILTIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- [ ] Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*

- [ ] By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at http://soildatamart.nrcs.usda.org/ or from the COGCC web site GIS Online map page found at http://colorado.gov/cogcc. Instructions are provided within the COGCC web site help section.

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

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☒ NRCS or, ☐ field observation Date of observation: _____

List individual species: Due to character limitations, please see comments on "Submit" page.

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☒ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe): _____

WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 176 Feet

water well: 4094 Feet

Estimated depth to ground water at Oil and Gas Location 120 Feet

Basis for depth to groundwater and sensitive area determination:

Groundwater depth estimated to nearest drainage (Horse Gulch) elevation difference.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer zone: No

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

Is the Location within a Floodplain? ☒ No ☐ Yes

Floodplain Data Sources Reviewed (check all that apply)

- ☐ Federal (FEMA)
- ☒ State
- ☐ County
- ☐ Local
- ☐ Other

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

WILDLIFE

- ☐ This location is included in a Wildlife Mitigation Plan
- ☐ This location was subject to a pre-consultation meeting with CPW held on _____

Operator Proposed Wildlife BMPs

No	Target Species	BMP Type	Description
1	Black Bear	Wildlife - Minimization	The operator will implement Rule 1204.a.1 (also see General Operating Recommendations).
2	Deer and Elk	Wildlife - Minimization	

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

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

OPERATOR COMMENTS AND SUBMITTAL

Comments

The reference point indicated on the Location Drawing is not the same well used in the "Location Identification" portion of the Form 2A.

Disposal Description: (Drilling Waste Management)
Laramie plans to drill the wells within this project boundary with a dewatering system with no need for a reserve pit. Drilling fluids are recycled and re-used with cuttings being de-watered and captured in a catch pan, stacked in a cuttings management area and allowed to dry. Once the cuttings are dry and satisfy the COGCC for rule 910 analytics, the cuttings will be stacked along the cut slope then buried and covered with a minimum of 3 feet of cover. This operation will occur after the completion of all the wells.

Map Unit Symbol 47: Hesperus-Empedrado, moist-Pagoda complex 5 to 35 percent slopes:
Hesperus: Gambel oak, Big bluegrass, Elk sedge, Nodding brome, Arizona fescue, Mountain snowberry, Needleandthread, Saskatoon serviceberry, Western wheatgrass
Empedrado, moist: Big bluegrass, Gambel oak, Elk sedge, Mountain brome, Saskatoon serviceberry, Slender wheatgrass, Mountain snowberry, Muttongrass, Needleandthread, Western wheatgrass
Pagoda: Gambel oak, Mountain brome, Saskatoon serviceberry, Elk sedge, Letterman's needlegrass, Mountain snowberry, Nodding brome, Slenderwheatgrass

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

Signed: _____ Date: 01/16/2017 Email: jproulx@laramie-energy.com

Print Name: Joan Proulx Title: Regulatory Analyst

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

COGCC Approved: _____ **Director of COGCC** Date: _____

Conditions Of Approval

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

Best Management Practices

No	BMP/COA Type	Description
1	Wildlife	**No RSO Section 30, All, Twn. 9S, Rng. 93W 6th PM Mesa County, CO SWH for Elk Winter Concentration Area In an effort to minimize the impacts to wildlife, the following BMP's are part of Laramie Energy's (LE) standard operating procedures for drilling and operations within the Piceance Basin. This list is a partial of LE's policy. Initial Stages for Infrastructure and Roads 1. Road design and General - No firearms, no dogs on location, and no feeding of wildlife. - Minimize the amount of traffic on lease roads within 3 hours of sunrise and sunset. - Use existing routes as much as possible to avoid new disturbance and habitat fragmentation and minimize new road construction. - Maximize the topography as much as possible in designing roads to reduce, visual, noise, impacts, etc. - Participate in road sharing agreements with other Operators when possible. - Design and surface roads based on the traffic, speed, and type of vehicles to reduce, dust, mud, and environmental damage. - Locate roads away from riparian areas and bottoms of drainages as much as possible or re-route entirely. - Obtain Army Corp of Engineer Permits for any stream crossings prior to construction. - Analyze crossings and flow characteristics to determine the best method of crossing, (i.e. culvert, bridge, or low water). - Armor all stream crossings to reduce erosion and to comply with Stormwater Requirements. - Implementation of fugitive dust control measures including but not limited to water or magnesium chloride applications, and road surfacing. - Limit traffic to the minimum needed for safe and efficient operations. - No driving or parking off of disturbed areas. - Install and use locked gates or other means when allowed by landowner or Federal Agencies to prevent unauthorized travel on roads and rights-of ways. 2. Well pad design and location - Locate well pads to maximize directional drilling practices. LE currently plans and attempts to locate pads for 16-20 wells which equates to roughly 4 well pads per section. - Design each location to accommodate both current and future gas production. - Locate well pads to minimize disturbance yet maximize use to reduce surface impacts. - Review State and Federal GIS mapping to avoid Sensitive Wildlife Habitat (SWH), Restricted Surface Occupancy (RSO) areas, steep slopes, etc., as much as possible with roads and pad location. - Design and install gathering lines within the disturbed area of new roads and adjacent to as much as possible to reduce disturbance construction. Design Rights-of Way widths to the minimum needed for safe and efficient construction of pipelines - Remote Telemetry for production operations 3. Drilling and Production Operations - Implement remote telemetry in all operations - Where topographically possible and subject to landowner approval, use centralized water gathering and transportation systems. - Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents, and openings. - Locate facilities to minimize visual effects (e.g. paint color, screening, etc.)

		- LE implements a closed system in its operations. No fluid pits are constructed or used during drilling or completion operations. - LE implements an aggressive weed management program. LE incorporates and uses the BLM Glenwood Springs Energy Office's "Noxious and Invasive Weed Management Plan for Oil and Gas Operators- March 2007" for all operations. Each spring, Laramie inventories all pads, roads, and pipelines to insure no noxious weeds have been introduced. If noxious weeds are found, the county will be notified and the weeds will be treated. Weeds are continuously monitored and treated throughout the growing season. Only herbicides approved by the EPA and State are used by certified weed applicators. 4. Reclamation - Strip and segregate topsoil from other soil horizons during pad, road, and pipeline construction. - Minimize topsoil degradation by windrowing no higher than 5 feet when possible. - Immediately seed topsoil to reduce erosion and prevent weed establishment and maintain soil microbial activity. - Use only certified weed free native seed mixes, unless recommended otherwise by Federal Agencies or the Landowner. - Use locally adapted seed when available. - Use diverse seed mixes to mirror the surrounding area unless recommended otherwise by Federal Agencies or the Landowner. - Monitor re-vegetation success until a minimum of 75% of preferred perennial plant cover (no weeds) is established. - Perform "interim" reclamation on all disturbed areas not needed for active producing operations. - If possible, conduct interim and final reclamation during optimum periods (e.g. late fall/early winter or early spring). - If needed, fence reclaimed areas to minimize livestock/wildlife impact until plant species have are capable of sustaining grazing.

2	Wildlife	**No RSO Section 30, All, Twn. 9S, Rng. 93W 6th PM Mesa County, CO SWH for Elk Winter Concentration Area Sensitive Wildlife Habitat (SWH) Black Bear • Initiate a food and waste/refuse management program that uses bear-proof food storage containers and trash receptacles. • Initiate an education program that reduces bear conflicts. • Establish policy to prohibit keeping food and trash in sleeping quarters. • Establish policy to support enforcement of state prohibition on feeding of black bear. • Report bear conflicts immediately to CDOW . Deer and Elk (Elk Winter Concentration Area) • Review State GIS and Federal GIS mapping databases at the initial stage of development to identify the locations of mule deer and elk important wintering habitats and production areas. Attempt to avoid any critical habitat patches with roads and development. • Attempt to avoid oil and gas activities within mule deer critical winter range, elk winter concentration areas, elk production areas, and migration corridors. • Attempt to conduct post-development well site visitation between the hours of 10:00 am and 3:00 pm, and reduce visitations between December 1th to April 15th to reduce the impact to the elk winter concentration area. • Phase and concentrate all development activities, so that large areas of undisturbed habitat for wildlife remain and thorough reclamation occurs immediately after development and before moving to new sites. Development should progress at a pace commensurate with reclamation success. • Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife. • Avoid aggressive non-native grasses and shrubs in reclamation. Landowner Concurrence Signature _ Date _____ C. Warren Bruton or Eric T. Bruton
3	Drilling/Completion Operations	Either the Bruton 30-01 E or the Bruton 30-02E wells drilled on the pad will be logged open-hole with a triple combo log (HRI w/ SP,GR, CAL and Spectral Density/Dual Spaced Neutron) from TD into the surface casing. All wells on the pad will have a radial analysis bond log with gamma ray run on production casing from TD to surface after rig moves off pad. All wells not logged with an open hole log will have a cased hole NEO neutron emulated open hole log run from TD to surface. 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 shall clearly state “No open-hole logs were run” and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run.

Total: 3 comment(s)

Attachment Check List

Att Doc Num	Name
401180345	FORM 2A SUBMITTED
401184008	TOPO MAP
401184011	REFERENCE AREA PICTURES
401184012	REFERENCE AREA MAP
401184092	OTHER
401184095	CONST. LAYOUT DRAWINGS
401184096	CONST. LAYOUT DRAWINGS
401184097	ACCESS ROAD MAP
401184099	LOCATION DRAWING
401184100	HYDROLOGY MAP
401184102	MULTI-WELL PLAN
401184103	OTHER
401184216	NRCS MAP UNIT DESC
401184341	SURFACE AGRMT/SURETY
401195202	LOCATION PICTURES

Total Attach: 15 Files

General Comments

User Group	Comment	Comment Date
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

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