

FORM
2ARev
04/01State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

400191341

Oil and Gas Location Assessment

☒ New Location ☐ Amend Existing Location Location#: _____

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

425524

Expiration Date:

09/24/2014☒ This location assessment is included as part of a permit application.

1. 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.

2. Operator

Operator Number: 10232

Name: LARAMIE ENERGY II, LLC

Address: 1512 LARIMER ST STE 1000

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Wayne P Bankert

Phone: (970) 683-5419

Fax: (303) 339-4399

email: wbankert@laramie-energy.com

4. Location Identification:

Name: FG Federal Number: 4-44-2

County: RIO BLANCO

QuarterQuarter: LOT 13 Section: 4 Township: 1N Range: 100W Meridian: 6 Ground Elevation: 6496

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1658 feet FSL, from North or South section line, and 72 feet FEL, from East or West section line.

Latitude: 40.082110 Longitude: -108.613040 PDOP Reading: 2.8 Date of Measurement: 07/27/2011

Instrument Operator's Name: George Allen

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="1"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="2"/>	Water Tanks: <input type="text"/>	Separators: <input type="text" value="1"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: Condensate and Water stored in common tanks

6. Construction:

Date planned to commence construction: 09/15/2011 Size of disturbed area during construction in acres: 4.70
Estimated date that interim reclamation will begin: 09/18/2014 Size of location after interim reclamation in acres: 1.10
Estimated post-construction ground elevation: 6492 Will a closed loop system be used for drilling fluids: Yes ☒
Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒
Mud disposal: Offsite ☒ Onsite ☐ Method: Land Farming ☐ Land Spreading ☐ Disposal Facility ☒
Other: _____

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 08/01/2011
Surface Owner: ☐ Fee ☐ State ☒ Federal ☐ Indian
Mineral Owner: ☐ Fee ☐ State ☒ Federal ☐ Indian
The surface owner is: ☒ the mineral owner ☒ committed to an oil and gas lease
☒ is the executer of the oil and gas lease ☐ the applicant
The right to construct the location is granted by: ☒ oil and gas lease ☐ Surface Use Agreement ☐ Right of Way
☐ applicant is owner
Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID _____

8. Reclamation Financial Assurance:

☐ Well Surety ID: _____ ☐ Gas Facility Surety ID: _____ ☐ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 2781, public road: 2670, above ground utilit: 30200
, railroad: 242880, property line: 9082

10. Current Land Use (Check all that apply):

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

11. Future Land Use (Check all that apply):

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

12. Soils:

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 be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.gov/> 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 13: Bulkley Channery Silty Clay Loam 5 to 30 % slopes

NRCS Map Unit Name: _____
NRCS Map Unit Name: _____

13. 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: 07/27/2011
List individual species: _____

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): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☒ No ☐ Yes
Distance (in feet) to nearest surface water: 577, water well: 11880, depth to ground water: 176
Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes
Is the location within a Rule 317B Surface Water Supply Area buffer zone:
☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. zone

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: ☐ No ☐ Yes

15. Comments:

Groundwater depth based on elevation difference to nearest drainage identified with potential surface water. No improvements within 200 feet of wellhead. A closed drilling system using a cuttings trench will be implemented.

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

Signed: _____ Date: 08/02/2011 Email: wbankert@laramie-energy.com

Print Name: Wayne P. Bankert Title: Snr. Reg. & Env. Coord.

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: David S. Neslin Director of COGCC Date: 9/25/2011

CONDITIONS OF APPROVAL, IF ANY:

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.

GENERAL SITE COAs:

Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.

The moisture content of any drill cuttings in a cuttings container or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or pit located on the well pad or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

Berms or other containment devices shall be constructed to be sufficiently impervious to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

Attachment Check List

Att Doc Num	Name
2033963	CORRESPONDENCE
400191341	FORM 2A SUBMITTED
400191391	NRCS MAP UNIT DESC
400191392	NRCS MAP UNIT DESC
400191393	ACCESS ROAD MAP
400191394	HYDROLOGY MAP
400191395	LOCATION DRAWING
400191396	REFERENCE AREA MAP
400191397	REFERENCE AREA PICTURES
400191398	LOCATION PICTURES
400191399	SURFACE PLAN
400191400	CONST. LAYOUT DRAWINGS

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
DOW	The wildlife BMPs as submitted by the operator on the Form 2A are appropriate for the site and species affected. Saturday, September 10, 2011 at 3:10 P.M.	9/10/2011 3:06:55 PM
Permit	Removed plugging bond and added SO is committed to an oil and gas lease Changed distance to road to 2,670'	8/29/2011 12:58:22 PM
OGLA	Initiated/Completed OGLA Form 2A review on 08-02-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks, tank berming, and cuttings low moisture content COAs from operator on 08-02-11; received clarifications and acknowledgement of COAs from operator on 08-02-11; passed by CDPW on 09-10-11 with operator submitted BMPs and BLM stipulations and COAs acceptable; passed OGLA Form 2A review on 09-13-11 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, tank berming, and cuttings low moisture content COAs.	3/2/2011 1:52:33 PM

Total: 3 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Storm Water/Erosion Control	<p>PROPOSED BMP's</p> <p>LARAMIE ENERGY II, LLC</p> <p>Fletcher Gulch Fed. 4-24-2 (Lat: 40.08675 Long: -108.61573) Fletcher Gulch Fed. 4-44-2 (Lat: 40.08211 Long: -108.61304) Sec. 4, Twn. 1N, Rng. 100W 6th PM Rio Blanco County, CO</p> <p>Stormwater Management</p> <p>Stormwater Management will be managed under (Laramie Energy II) LE II's Stormwater Management Plan known as the "Fletcher Gulch Project Area" under CDPHE General Permit No.(Permit Pending)</p> <p>Prior to construction a stormwater "perimeter" will be built around the site for initial work purposes. Once the pad construction is completed, LE II's Stormwater Administrator will inspect the site and install any necessary Erosion Control Devices to manage sediment discharge from the pad. These devices may include but are not limited to:</p> <ul style="list-style-type: none">- Rock Check dams- Settling ponds- Straw waddles- Silt Fencing (used sparingly) <p>Once the final stormwater Erosion Control Devices are installed they will be mapped in GIS and a diagram of the site will be drafted and included as part of the Stormwater Documentation as required by the CDPHE General Permit.</p> <p>Each site will be inspected every 14 days and 72 hrs after any major storm event. These inspections will be recorded and documented in the Stormwater Manual onsite and any necessary repairs or modifications will be made and documented.</p> <p>Spill Prevention Control and Counter Measures(SPCC)</p> <p>Once the wells are drilled and completed onsite Laramie Energy II's will develop a an SPCC for the wells.</p>

Wildlife	<p>Area was analyzed in 2006 and 2009 under BLM CO-110-2006-200-EA and CO-110-2009-0180-EA Environmental Analysis. In addition, Federal lease COC-63322 has winter timing restrictions imposed.</p> <p>LARAMIE ENERGY II, LLC</p> <p>Best Management Practices (BMP's) To Reduce Impacts to Wildlife Within Sensitive Wildlife Habitat Areas of Piceance Basin, CO</p> <p>In an effort to minimize the impacts to wildlife, the following BMP's are part of Laramie Energy II's (LEII) standard operating procedures for drilling and operations within the Piceance Basin. This list is a partial of LEII's policy.</p> <p>Initial Stages for Infrastructure and Roads</p> <p>1. Road design and General</p> <ul style="list-style-type: none"> - 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. <p>2. Well pad design and location</p> <ul style="list-style-type: none"> - Locate well pads to maximize directional drilling practices. LEII 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 <p>3. Drilling and Production Operations</p> <ul style="list-style-type: none"> - 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
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stacks, vents, and openings.

- Locate facilities to minimize visual effects (e.g. paint color, screening, etc.)
- LEII implements a closed system in its operations. No fluid pits are constructed or used during drilling or completion operations.
- LEII implements an aggressive weed management program. LEII 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.

LARAME ENERGY II, LLC
 BMPS FOR
 Sensitive Wildlife Habitat and Restricted Surface Occupancy
 Areas Specific to Laramie Energy II, LLC
 Operations Within the Piceance Basin
 Garfield County, CO

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 .

Mule Deer winter Range or Elk Winter Concentration and- or Elk Production SWA

- 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. Reduce visitations from December 1st to April 30th to reduce impact to wintering wildlife.
- Phase and concentrate all development activities, so that large areas of undisturbed habitat for wildlife remain and thorough reclamation occurs immediately after

	<p>development and before moving to new sites. Development should progress at a pace commensurate with reclamation success.</p> <ul style="list-style-type: none">• Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife.• Avoid aggressive non-native grasses and shrubs in reclamation.
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Total: 2 comment(s)