FORM 2A Rev 04/01

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: 400414014

Date Received: 05/09/2013

☐ New Location ☒ Amend Existing Location Location#: 416177

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: **416177**

Expiration Date: **07/20/2016**

☒ 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: 10433

Name: PICEANCE ENERGY LLC

Address: 1512 LARIMER STREET #1000

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Wayne P Bankert

Phone: (970) 812-5310

Fax: (303) 339-4399

email: wbankert@laramie-energy.com

4. Location Identification:

Name: Knox Number: 03-16 Pad

County: GARFIELD

QuarterQuarter: SESE Section: 3 Township: 8S Range: 96W Meridian: 6 Ground Elevation: 5499

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: 1362 feet FSL , from North or South section line, and 20 feet FEL , from East or West section line.

Latitude: 39.375340 Longitude: -108.086275 PDOP Reading: 2.6 Date of Measurement: 08/18/2009

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:	0	Drilling Pits:	1	Wells:	6	Production Pits:	0	Dehydrator Units:	0
Condensate Tanks:	3	Water Tanks:	0	Separators:	2	Electric Motors:	0	Multi-Well Pits:	0
Gas or Diesel Motors:	0	Cavity Pumps:	0	LACT Unit:	0	Pump Jacks:	0	Pigging Station:	0
Electric Generators:	0	Gas Pipeline:	1	Oil Pipeline	0	Water Pipeline:	0	Flare:	0
Gas Compressors:	0			VOC Combustor:	1	Oil Tanks:	0	Fuel Tanks:	0

Other: 2 phase separation. Condensate and Water into common tanks. 6 separators (one 4-pack, one 2-pack)

6. Construction:

Date planned to commence construction: 05/01/2014 Size of disturbed area during construction in acres: 4.30

Estimated date that interim reclamation will begin: 05/01/2017 Size of location after interim reclamation in acres: 0.90

Estimated post-construction ground elevation: 5499 Will a closed loop system be used for drilling fluids: Yes [X]

Will salt sections be encountered during drilling: Yes [ ] No [X] Is H2S anticipated? Yes [ ] No [X]

Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes [ ] No [X]

Mud disposal: Offsite [X] Onsite [ ] Method: Land Farming [ ] Land Spreading [ ] Disposal Facility [X]

Other:

7. Surface Owner:

Name: Phone:

Address: Fax:

Address: Email:

City: State: Zip: Date of Rule 306 surface owner consultation: 03/23/2009

Surface Owner: [X] Fee [ ] State [ ] Federal [ ] Indian

Mineral Owner: [X] Fee [ ] State [ ] Federal [ ] Indian

The surface owner is: [X] 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 [X] 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:

[X] Well Surety ID: 20120081 [ ] Gas Facility Surety ID: [ ] Waste Mgnt. Surety ID:

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes [ ] No [X]

Distance, in feet, to nearest building: 230 , public road: 760 , above ground utility: 380 , railroad: 10955 , property line: 0

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

Crop Land: [ ] Irrigated [ ] Dry land [ ] Improved Pasture [ ] Hay Meadow [ ] CRP

Non-Crop Land: [X] 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: [X] 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 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: Potts-Loam 6-12% Slopes Map Unit Description 56

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: 08/18/2009

List individual species: Scattered Downy Brome, Canada Thistle, Houndstongue, Common Mullein

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: 240 , water well: 670 , depth to ground water: 36

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 Suppl 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:

THIS IS A RE-FILE FOR LOCATION ID 416177 THAT HAS EXPIRED. THE LOCATION WAS NEVER CONSTRUCTED.There are no changes to the previously submitted and approved Location Assessment. Please Note Page 11 Paragraph 8.2 of SUA waives Section 305 and 306 consultation.

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

Signed: Date: 05/09/2013 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: Matthew Lee **Director of COGCC** Date: 7/21/2013

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.

SITE SPECIFIC COA:

Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

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

If the wells are to be hydraulically stimulated, then flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permit has been submitted/approved) 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.

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service.

Attachment Check List

Att Doc Num	Name
2157153	EXCEPTION LOC WAIVERS
2157154	EXCEPTION LOC REQUEST
400414014	FORM 2A SUBMITTED
400415851	SURFACE AGRMT/SURETY

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date
Permit	Attached exc. loc. req. ltr. and waivers. No LGD or public comments. Final Review--passed.	7/8/2013 1:21:38 PM
Permit	Attached SUA describes agreement between the Knox family members who own the surface surrounding the pad and operator. Prop. line distance is 0' but surface owners have all signed SUA. Req'd exc. loc. and waivers.	5/17/2013 9:13:17 AM
DOW	The original BMPs approved for the Laramie Energy II, LLC Knox 03-16 pad (dated 1-11-2010) will be applied to the Piceance Energy LLC Knox 03-16 pad. Colorado Parks and Wildlife concurs that the BMPs originally applied to this well pad dated 1-11-10 adequately address wildlife concerns. Approved:Jim Komatinsky 5-13-2013	5/13/2013 3:09:30 PM
OGLA	Initiated/Completed OGLA Form 2A review on 05-02-13 by Dave Kubeczko; previously submitted and approved (03-15-10) Form 2A#2094049; OGCC Facility ID#416177; same COAs apply: fluid containment, spill/release BMPs, and lined drilling pit/closed loop; added notification, cuttings low moisture, and flowback to tanks COAs; passed by CPW on 05-17-13 with previous Form 2A BMPs acceptable; passed by OGLA Form 2A review on 06-04-13 by Dave Kubeczko; fluid containment, spill/release BMPs, cuttings low moisture, lined drilling pit/closed loop, and notification COAs.	5/11/2013 6:48:36 PM
OGLA	PREVIOUS FORM 2A#2094049 COAs: Location is in a sensitive area because of proximity to a domestic water well; therefore production pits must be lined. Location is in a sensitive area because of proximity to a domestic water well and shallow groundwater; therefore either a lined drilling pit or closed loop system must be implemented. Operator must implement best management practices to contain any unintentional release of fluids. Location is in a sensitive area because of close proximity to surface water, therefore, operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations.	5/11/2013 6:48:35 PM

Total: 5 comment(s)

BMP

Type	Comment
Wildlife	In an effort to minimize the impacts to wildlife, the following BMP's are standard operating procedures for drilling and operations within the Piceance Basin. This list is a partial of Piceance Energy's policy. PICEANCE ENERGY LLC BMPS FOR Sensitive Wildlife Habitat and Restricted Surface Occupancy Areas Specific to operations within the Piceance Basin Garfield County, CO 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. 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 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.) - 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. 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 • 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. • 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

Total: 1 comment(s)