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: 400604661

Date Received: 05/16/2014

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

Location ID: **438499**

Expiration Date: **08/09/2017**

Submit signed original form. 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.

☒ 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: PICEANCE ENERGY LLC

Address: 1512 LARIMER STREET #1000

City: DENVER State: CO Zip: 80202

Contact Information

Name: Wayne P Bankert

Phone: (970) 812-5310

Fax: (303) 339-4399

email: wbankert@laramie-energy.com

RECLAMATION FINANCIAL ASSURANCE

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

☐ Waste Management Surety ID:

LOCATION IDENTIFICATION

Name: Piceance Number: 28-11 Pad

County: MESA

QuarterQuarter: NESW Section: 28 Township: 9S Range: 93W Meridian: 6 Ground Elevation: 7583

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: 2515 feet FSL from North or South section line

1608 feet FWL from East or West section line

Latitude: 39.247810 Longitude: -107.778090

PDOP Reading: 2.5 Date of Measurement: 10/05/2012

Instrument Operator's Name: Dave Murrey

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	22	Oil Tanks		Condensate Tanks	10	Water Tanks		Buried Produced Water Vaults	
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks		Separators	6	Injection Pumps		Cavity Pumps			
Gas or Diesel Motors		Electric Motors		Electric Generators		Fuel Tanks		Gas Compressors	
Dehydrator Units		Vapor Recovery Unit		VOC Combustor	1	Flare		LACT Unit	
								Pigging Station	

OTHER FACILITIES

Other Facility Type	Number

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

8" Steel Gas Gathering and 6" Steel Waterline will be installed to pad and tied into existing 12" gas and 6" Water in SWNE Sec. 28, Twn 9S, Rng. 93W which feeds to the
Mega Vega Compressor Station in NE4 Sec. 22, Twn. 9S, Rng. 93W.
Spearators are five 4-packs and one 2-pack.
Tanks are combination Condensate/Produced water.

CONSTRUCTION

Date planned to commence construction: 08/01/2014 Size of disturbed area during construction in acres: 8.40

Estimated date that interim reclamation will begin: 08/01/2017 Size of location after interim reclamation in acres: 2.40

Estimated post-construction ground elevation: 7583

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: Cuttings trench

Other Disposal Description:

Cuttings to be tested to 910 standards and will be buried on location.
Drilling mud will be Recycled Reused in other drilling operations. Once all drilling operations are completed the drilling mud will be disposed of at a commercial disposal facility.

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Piceance Energy, LLC Phone: 303-339-4400

Address: 1512 Larimer Street Suite 1000 Fax: 303-339-4399

Address: Email: wbankert@laramie-energy.com

City: Denver State: CO Zip: 80202

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner:
- ☒ is the mineral owner
- ☐ is committed to an oil and Gas Lease
- ☐ has signed the Oil and Gas Lease
- ☒ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: applicant is owner

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

Date of Rule 306 surface owner consultation 04/01/2014

CURRENT AND FUTURE LAND USE

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		

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		

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building:	2800	Feet
Building Unit:	4520	Feet
High Occupancy Building Unit:	5280	Feet
Designated Outside Activity Area:	5280	Feet
Public Road:	5280	Feet
Above Ground Utility:	1960	Feet
Railroad:	5280	Feet
Property Line:	1235	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.

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.

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: _____

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 39: Fughes-Hesperus complex, 3 to 12% 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: 05/13/2014

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): _____

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 275 Feet

water well: 2470 Feet

Estimated depth to ground water at Oil and Gas Location 42 Feet

Basis for depth to groundwater and sensitive area determination:

Site was cored winter 2014. Ground water (wet soils) was encountered at 42'

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:

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ 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

Irrigation laterals to be rerouted around location.
Note: COGCC Order 399-7 Excuses Piceance Energy from consultation with CDOW (CPW) contained in rule 306c.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.
Signed: _____ Date: 05/16/2014 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: 8/10/2014

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
	The access road will be constructed and maintained as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water. Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources. 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 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. If permanent crude, condensate, and water tanks are placed at the site, operator shall install a steel containment ring around tank batteries to provide secondary containment and install a synthetic liner that underlies the entire battery and is keyed into the top of the containment ring.
	Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.
	The moisture content of any drill cuttings in a cuttings trench or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if drill cuttings are to remain/disposed of onsite, they must also meet the applicable standards of table 910-1. 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 storage vessel 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 constructed to be sufficiently impervious to contain any spilled or released material.
	Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Best Management Practices

No	BMP/COA Type	Description
1	Wildlife	PICEANCE ENERGY, LLC

Best Management Practices (BMP's)
To Reduce Impacts to Wildlife on the Piceance 28-11 Pad
For Operations in Sec. 25, Twn. 9S, Rng. 93W 6th PM
Mesa County, CO

COGCC Mapping indicates:
** NO RSO (Restricted Surface Occupancy) on the S Piceance 28-11 Pad
** SWH (Elk Winter Range and Black Bear) on the Piceance 28-11 Pad
Note: COGCC Order 399-7 Excuses Piceance Energy from consultation with CDOW (CPW) contained in rule 306c.

In an effort to minimize the impacts to wildlife, the following BMP's are part of Piceance Energy's (PE) standard operating procedures for drilling and operations within the Piceance Basin. This list is a partial of PE'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. PE currently plans and attempts to locate pads for the maximum number of wells which can safely be developed from each pad. This is normally 16-20 wells per pad 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.) - PE implements a dewatering system in its operations. No fluid pits are constructed or used during drilling or completion operations. - PE implements an aggressive weed management program. PE incorporates and uses the BLM Colorado River Valley Field Office's "Noxious and Invasive Weed Management Plan for Oil and Gas Operators- March 2007" for all operations. Each spring, Piceance Energy 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. PICEANCE ENERGY, LLC BMPS FOR Sensitive Wildlife Habitat and Restricted Surface Occupancy Areas Specific to Piceance Energy, LLC Operations within the Piceance Basin Mesa 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 CPW . Signature _/s/ Wayne P. Bankert_____ Date ___5/8/2014_____ Wayne P. Bankert Senior Reg. & Env. Coordinator
2	Storm Water/Erosion Control	CDPHE Stormwater Cerification Number COR03K454 for North Vega Project Area includes this locaiton

Total: 2 comment(s)

Attachment Check List

Att Doc Num	Name
2107061	CORRESPONDENCE
400604661	FORM 2A SUBMITTED
400605166	REFERENCE AREA PICTURES
400605170	LOCATION PICTURES
400605171	ACCESS ROAD MAP
400605173	HYDROLOGY MAP
400605174	LOCATION DRAWING
400605175	MULTI-WELL PLAN
400605177	FACILITY LAYOUT DRAWING
400605240	SURFACE PLAN
400609572	FACILITY LAYOUT DRAWING
400610034	CONST. LAYOUT DRAWINGS
400610047	NRCS MAP UNIT DESC
400610048	NRCS MAP UNIT DESC

Total Attach: 14 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed on this refile. No LGD comments.	3/5/2014 8:33:42 AM
OGLA	Initiated/Completed OGLA Form 2A review on 05-21-14 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, sediment/dust control access road, notification, tank berming, flowback to tanks, cuttings low moisture content, and pipeline testing COAs from operator on 05-21-14; received acknowledgement of COAs from operator on 05-22-14; passed by CPW on 05-19-14 with operator submitted BMPs acceptable; passed OGLA Form 2A review on 07-23-14 by Dave Kubeczko; fluid containment, spill/release BMPs, sediment/dust control access road, notification, tank berming, flowback to tanks, cuttings low moisture content, and pipeline testing COAs.	5/21/2014 3:46:41 PM
DOW	The BMPs and conditions of approval included in the Form 2A application adequately address wildlife concerns. Approved:Jim Komatinsky 5-19-2014	5/19/2014 1:35:53 PM
Permit	Passed completeness	5/19/2014 10:54:11 AM

Total: 4 comment(s)