

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



Document Number:

400690610

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Date Received:

10/03/2014

Oil and Gas Location Assessment

New Location  Refile  Amend Existing Location Location#: 334426

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.

Location ID:

**334426**

Expiration Date:

**11/05/2017**

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) 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: Gunderson

Number: 29-09 PAAd

County: MESA

Quarter: SENE Section: 29 Township: 9S Range: 93W Meridian: 6 Ground Elevation: 7538

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: 2419 feet FNL from North or South section line

1268 feet FEL from East or West section line

Latitude: 39.248770 Longitude: -107.788250

PDOP Reading: 1.0 Date of Measurement: 07/25/2014

Instrument Operator's Name: Eric Purcell

## 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	<u>21</u>	Oil Tanks*	<u>      </u>	Condensate Tanks*	<u>10</u>	Water Tanks*	<u>      </u>	Buried Produced Water Vaults*	<u>      </u>
Drilling Pits	<u>      </u>	Production Pits*	<u>      </u>	Special Purpose Pits	<u>      </u>	Multi-Well Pits*	<u>      </u>	Modular Large Volume Tanks	<u>      </u>
Pump Jacks	<u>      </u>	Separators*	<u>22</u>	Injection Pumps*	<u>      </u>	Cavity Pumps*	<u>      </u>	Gas Compressors*	<u>      </u>
Gas or Diesel Motors*	<u>      </u>	Electric Motors	<u>      </u>	Electric Generators*	<u>      </u>	Fuel Tanks*	<u>      </u>	LACT Unit*	<u>      </u>
Dehydrator Units*	<u>      </u>	Vapor Recovery Unit*	<u>      </u>	VOC Combustor*	<u>1</u>	Flare*	<u>      </u>	Pigging Station*	<u>      </u>

## OTHER FACILITIES\*

Other Facility Type

Number

<u>Other Facility Type</u>	<u>Number</u>

\*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:

8" Steel Gas Gathering and 6" Steel Waterline will be installed to pad and tied into existing 12" gas and 6" water in the SWNE Sec. 28, Twn. 9S, Rng. 93W which feed to the Mega Vega Compressor Station in the NE4 Sec. 22, Twn. 9S, Rng. 93W.

Separators are five 4-packs and one 2-pack.

Tanks are combination Condensate/Produced Water.

Flowlines from the wellheads to the separators will be 2" steel. The produced water/condensate flowlines from the separators to the ten (10) condensate (and produced water) tanks will be 2" steel. All disturbance will be within pad boundaries and exist pipeline right-of-ways. All flowlines will be buried 4' deep.

## CONSTRUCTION

Date planned to commence construction: 11/18/2014 Size of disturbed area during construction in acres: 10.20

Estimated date that interim reclamation will begin: 11/18/2017 Size of location after interim reclamation in acres: 3.20

Estimated post-construction ground elevation: 7536

## DRILLING PROGRAM

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

Is H<sub>2</sub>S 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 St 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 07/11/2014

## 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**

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

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	1120 Feet	1320 Feet
Building Unit:	4200 Feet	3730 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	5280 Feet	5280 Feet
Above Ground Utility:	350 Feet	430 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	1120 Feet	1190 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.

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 FACILITIES 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: 42. Grobutte: Very Channery Loam; 30-60 % 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: \_\_\_\_\_

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: \_\_\_\_\_ 560 Feet

water well: \_\_\_\_\_ 881 Feet

Estimated depth to ground water at Oil and Gas Location \_\_\_\_\_ 98 Feet

Basis for depth to groundwater and sensitive area determination:

Depth based on nearest surface water elevation subtracted from location elevation. 7538-7440'.

Sensitive area determination: Water well is greater than 1/8 mile from proposed site. Site is not in sensitive area based on the Rule 100 series definition of "Sensitive Area"

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 \_\_\_\_\_ No  
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: \_\_\_\_\_

## 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 This is a Re-File of the Former Operators (Delta Pet.) Location ID No. 334426. An overlay exhibit of the previous location is provided for reference.

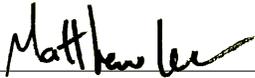
Note: COGCC Order 399-7 Excuses Piceance Energy from consultation with CDOW (CPW) contained in Rule 306c.

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

Signed: \_\_\_\_\_ Date: 10/03/2014 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:  Director of COGCC Date: 11/6/2014

### 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.**

<b>COA Type</b>	<b>Description</b>
	<p>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.</p> <p>Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.</p>
	<p>The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. No offsite reuse of cuttings to another oil and gas location shall occur without prior approval of a Beneficial Reuse or Land Application Plan (submitted via a Form 4 Sundry Notice) specifying reuse or application, location, and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.</p> <p>If the well(s) is(are) to be hydraulically stimulated, 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.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at tank site during 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 after precipitation events), and maintained in good condition.</p> <p>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.</p> <p>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.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.</p>
	<p>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).</p>

**Best Management Practices**

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

Best Management Practices (BMP's)  
To Reduce Impacts to Wildlife on the Gunderson 29-09 Pad  
For Operations in Sec. 29, Twn. 9S, Rng. 93W 6th PM  
Mesa County, CO

COGCC Mapping indicates:

\*\* NO RSO (Restricted Surface Occupancy) on the Gunderson 29-09 Pad

\*\* SWH (Elk Winter Range and Black Bear) on the Gunderson 29-09 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.



Total: 2 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107146	CORRESPONDENCE
400690610	FORM 2A SUBMITTED
400691495	CONST. LAYOUT DRAWINGS
400691496	LOCATION PICTURES
400691497	REFERENCE AREA PICTURES
400691498	ACCESS ROAD MAP
400691499	HYDROLOGY MAP
400691500	LOCATION DRAWING
400691501	MULTI-WELL PLAN
400691502	REFERENCE AREA MAP
400691548	CONST. LAYOUT DRAWINGS
400691554	SURFACE PLAN
400695323	OTHER

Total Attach: 13 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Opr has requested this 2A (which is off public comment and passed by DOW) prior to the approval of the form 2's in order to begin work on the location. Final review complete.	11/6/2014 11:21:31 AM
OGLA	Initiated/Completed OGLA Form 2A review on 10-21-14 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, tank berming, sediment control, dust control, odor control, and pipeline testing COAs from operator on 10-21-14; received acknowledgement of COAs from operator on 10-22-14; passed by CPW on 10-14-14 with operator submitted BMPs acceptable and that the operator obtained a Commission order from COGCC pursuant to rule 1202.d(5) that grants an exemption from wildlife consultation for this location; passed OGLA Form 2A review on 11-05-14 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, tank berming, sediment control, dust control, odor control, and pipeline testing COAs.	10/21/2014 4:26:08 PM
DOW	Colorado Parks and Wildlife finds the operators submitted BMPs adequate to address wildlife concerns at this location. Furthermore, CPW acknowledges that the operator has, in accordance with Rule 503, obtained a Commission order from COGCC pursuant to rule 1202.d(5) that grants an exemption from wildlife consultation for this location.  By: Taylor Elm, 10/14/2014, 16:35	10/14/2014 4:37:10 PM
Permit	Passed Completeness	10/7/2014 11:59:58 AM

Total: 4 comment(s)