

FORM  
2A

Rev  
04/18

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:

401553107

Date Received:

05/30/2018

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 335720

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:

**335720**

Expiration Date:

**07/07/2021**

☒ 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: 10456  
Name: CAERUS PICEANCE LLC  
Address: 1001 17TH STREET #1600  
City: DENVER State: CO Zip: 80202

Contact Information

Name: Michelle Molinar  
Phone: (720) 880-6347  
Fax: (303) 565-4606  
email: mmolinar@caerusoilandgas.com

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20130021 ☐ Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- ☐ Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: NPR Number: A03-596  
County: GARFIELD  
QuarterQuarter: SENE Section: 3 Township: 5S Range: 96W Meridian: 6 Ground Elevation: 8330  
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: 1364 feet FNL from North or South section line  
553 feet FEL from East or West section line  
Latitude: 39.647631 Longitude: -108.148108  
PDOP Reading: 1.5 Date of Measurement: 03/01/2018  
Instrument Operator's Name: Bart Hunting

## 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>17</u>	Oil Tanks*	<u>      </u>	Condensate Tanks*	<u>      </u>	Water Tanks*	<u>1</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>      </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>      </u>	Flare*	<u>1</u>	Pigging Station*	<u>      </u>

## OTHER FACILITIES\*

### Other Facility Type

### Number

Chemical Pumps	<u>7</u>
3-Phase Production Meter Skids	<u>3</u>
Gas Lift Meter Skids	<u>4</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:

Sub-surface flow lines for new wells from wellhead to the production meter skids will be 3" steel. An existing 12" steel 3-phase flowline will be utilized from the skid to the Middle Fork Compressor Station.  
2" steel lines will be run from the gas lift meter skids to the wellheads.

## CONSTRUCTION

Date planned to commence construction: 09/03/2018 Size of disturbed area during construction in acres: 6.82

Estimated date that interim reclamation will begin: 09/02/2019 Size of location after interim reclamation in acres: 1.90

Estimated post-construction ground elevation: 8330

## 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: Beneficial reuse

Other Disposal Description:

Waste Management Plan attached.

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: Caerus Piceance LLC

Phone: 303-565-4600

Address: 1001 17th Street, Suite 1600

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

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 \_\_\_\_\_

## 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.

	From WELL	From PRODUCTION FACILITY
Building:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 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:	5280 Feet	5280 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	477 Feet	448 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 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 be 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: NRCS #48 — Northwater loam, 15 to 65 percent slopes

NRCS Map Unit Name: NRCS # 53 — Parachute-Rhone loams, 5 to 30 percent slopes

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: 528 Feet

water well: 2362 Feet

Estimated depth to ground water at Oil and Gas Location 25 Feet

Basis for depth to groundwater and sensitive area determination:

Permit # 308231; SWSW Sec. 35-T4S-R96W; Depth: 25'

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: \_\_\_\_\_

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 \_\_\_\_\_

## 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 This pad was previously built by EnCana. The pad has 3 existing shut-in wells. Caerus Piceance LLC plans to drill an additional 14 wells. Some pad expansion will occur.

A03 3-PHASE GATHERING OPERATIONS  
Gas will be gathered by Caerus to Middle Fork Compressor Station and discharged to third party gathering. Condensate will be trucked off location and water sent to Middle Fork Treatment Facility.

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

Signed: \_\_\_\_\_ Date: 05/30/2018 Email: mmolinar@caerusoilandgas.com

Print Name: Michelle Molinar Title: Drilling Regulatory Tech

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: 7/8/2018

## 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
	<p>In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to Construct a New Location, Notice of Intent to Spud Surface Casing, and Notice of Intent to Commence Hydraulic Fracturing Operations) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment and c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to pipeline testing (flowlines from wellheads to separators to tanks; permanent buried take away pipelines; and/or any temporary surface lines used for hydraulic stimulation and/or flowback operations) using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.</p>
	<p>The access road will be 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>Operator shall submit an as-built drawing that shows how the 3-phase material is collected and leaves the NPR A03-596 Pad and also provide a schematic diagram showing the nearby production facility with the 3-phase entry point; within 60 calendar days of construction of the production equipment on either or both locations.</p>
	<p>The moisture content of water/bentonite based mud (WBM) generated 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, if any of the WBM drill cuttings will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), they must be sampled and meet the applicable standards of Table 910-1. No liners (if used) are allowed to be disposed of with the drill cuttings. 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 Form 4 Sundry Notice specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will require notification (no prior approval) to COGCC via a Form 4 Sundry Notice.</p> <p>Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or open top containment located on the well pad; or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. 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. No additional downgradient berming is required if operator constructs a sufficiently sized perimeter berm.</p>
	<p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	Use or modify existing roads where possible. Maximize the use of directional drilling to minimize habitat loss/fragmentation. Maximize use of remote telemetry for well monitoring to minimize traffic.
2	General Housekeeping	Caerus will comply with Rule 609 Statewide Groundwater Baseline Sampling and Monitoring. Caerus will comply with Rule 603.f. statewide equipment, weeds, waste, and trash requirements.
3	Wildlife	September 2017 - Caerus Piceance LLC (Caerus) agreed to the Amended and Restated Wildlife Mitigation Plan (WMP) for Encana's proposed oil and gas operations on the North Parachute Ranch (NPR) property. Caerus received authorization from Colorado Parks and Wildlife (CPW) to transfer the EnCana Wildlife Mitigation Plan Agreement (WMPA) to Caerus' existing WMPA. Caerus is currently adhering to all aspects of both WMPAs through Caerus' current best management practices.
4	Storm Water/Erosion Control	Stormwater is addressed under a field-wide Stormwater Management Plan (CDPHE Certification #COR037689). Run-on protection and run-off controls will be installed prior to the beginning of construction activities, with consideration given to worker safety, wildlife, and site access.
5	Construction	Pad is already built. Minimal expansion required. Any stockpile(s) for topsoil and excess cut material will be located in work areas surrounded by the BMPs as shown on the Construction Layout Drawings. Stormwater BMPs will be installed per details in the Stormwater Management Plan (SWMP) and as shown on the Construction Layout Drawings. Disturbed area of site will be left in a surface roughened condition when feasible. BMPs will be protected, inspected and repaired as necessary. Dust mitigation practices will be utilized. Existing buried flow and water lines in place. Any new flowline installations will be performed in accordance with new flowline guidance provided by the COGCC concerning Rules 1101 and 1102. Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with synthetic liner) to adequately contain any spilled or released material around crude oil, condensate, and produced water storage tanks, while also ensuring the adequate prevention of significant adverse environmental impacts.
6	Drilling/Completion Operations	Closed loop system will be used. No pits will be built. An enclosed flare stack will be used. Caerus will ensure 110 percent secondary containment for any potential volume of fluids that may be released.
7	Interim Reclamation	Once all topsoil has been distributed across the site, the location is then seeded by drill seeding methods or broadcast seeding. Re-vegetation is accomplished as soon as practical following the preparation of a site for final stabilization. Seeding will be done when seasonal or weather conditions are most favorable. On terrain where drill seeding is appropriate, seed may be planted using a drill equipped with a depth regulator to ensure proper depth of planting. Where possible, recountouring to help control run-on and run-off will be done.
8	Final Reclamation	Re-contouring: The disturbed areas surrounding the well location, including the access road will be re-contoured to blend as nearly possible with the natural topography. Final grading of back-filled and cut slopes will be done to prevent erosion and encourage establishment of vegetation. Existing drainages will be re-established. Re-vegetation: The long term objective is to establish a self-perpetuating plant community that is compatible with and capable of supporting the identified land use. Noxious weeds will be treated in accordance with applicable COGCC rules.

Total: 8 comment(s)



## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2108485	MULTI-WELL PLAN for EXISTING SHUT-IN WELLS
401553107	FORM 2A SUBMITTED
401651592	NRCS MAP UNIT DESC
401651593	NRCS MAP UNIT DESC
401651619	CONST. LAYOUT DRAWINGS
401651622	MULTI-WELL PLAN
401651624	REFERENCE AREA MAP
401651627	REFERENCE AREA PICTURES
401651629	LOCATION DRAWING
401651647	FACILITY LAYOUT DRAWING
401653258	LOCATION PICTURES
401653259	ACCESS ROAD MAP
401653261	ACCESS ROAD MAP
401657044	WASTE MANAGEMENT PLAN
401657245	HYDROLOGY MAP

Total Attach: 15 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	07/03/2018
Permit	Preliminary review complete.	06/28/2018
OGLA	06/05/2018 - location does fall within 'Sensitive Wildlife Habitat' area, therefore a CPW Wildlife consult is required; passed by CPW with the following statement - "This location falls within the renewed Caerus North Parachute Ranch Wildlife Mitigation Plan (WMP). The terms of the WMP are sufficient to address wildlife concerns associated with the proposed action."; 06/24/2018 - initiated / completed OGLA Form 2A review by Dave Kubeczko; placed the following COAs on the Form 2A - notification, non-scaled as-built, sediment control access road, cuttings containment and management, odor control, and flowback to tanks only; 06/24/2018 - due to proximity of the well pad to downgradient surface water (stream located 528' to the west-southwest) and potential for shallow groundwater (25' below ground surface), COGCC has designated this location a "sensitive area"; 06/27/2018 - passed OGLA Form 2A review by Dave Kubeczko with notification, non-scaled as-built, sediment control access road, cuttings containment and management, odor control, and flowback to tanks only COAs.	06/24/2018
DOW	This location falls within the renewed Caerus North Parachute Ranch Wildlife Mitigation Plan (WMP). The terms of the WMP are sufficient to address wildlife concerns associated with the proposed action. CPW and Caerus met in January 2018 to discuss the 2018 schedule of operations.  Taylor Elm, June 5, 2018, 12:56 pm	06/05/2018
Permit	Passed Completeness.	06/05/2018

Total: 5 comment(s)