



EXECUTIVE SUMMARY

CAMERON 1 OGD

Bypass State 5N66W18 1-23

Denali 5N67W13 -123

PDC Energy (PDC) is proposing to construct the Bypass State 5N66W18 1-23 and Denali State 5N67W13 1-23 locations. The Project consists of the development of infrastructure to support the drilling and production of 23 oil and gas wells from a each well pad. The Bypass is located in Lot 2, NW ¼ Section 18, Township 5 North, Range 66 West, 6th Principal Meridian, and the Denali is located in the SESW Section 13, Township 5 North, Range 66 West. These locations have been granted preliminary siting approval as they are within PDC’s Guanella Comprehensive Area Plan (CAP) that was approved by the COGCC on December 8, 2022.

Construction associated with the Bypass Pad would result in a total estimated initial disturbance of approximately 20.9 acres and long-term disturbance of 13.9 acres. Construction associated with the Denali Pad (including access road) would result in a total estimated initial disturbance of approximately 18.08 acres and long-term disturbance of 9.45 acres. Initial and long-term disturbance by project feature is summarized in Table 1. Residual disturbance includes acreage that would remain disturbed for the life of the project (LOP), which is approximately 29 years plus the time required to successfully reestablish vegetation (those acres not subject to interim reclamation). Site reclamation would be initiated for portions of the well pad not required for the continued operation of the well within 6 months of completion and production, weather permitting.

Project Feature	#/Miles	Initial (acres)	Long-Term (acres) ¹
New Bypass State Well Pad	1 well pad	20.9	13.9
New Access Roads Corridor	0.47 miles	1.5	1.5
Location Total	--	22.4	15.4

Project Feature	#/Miles	Initial (acres)	Long-Term (acres) ¹
New Denali State Well Pad	1 well pad	16.2	6.9
New Access Roads Corridor	0.50 miles	1.9	1.9
Location Total	--	18.1	8.8

The development of these locations would result in the plugging and reclamation (P&R) of 40 wells in the vicinity of the Bypass and Denali pads. This P&R activity equates to approximately 48 acres of vegetation and wildlife habitat that will be restored to the ecosystem. The P&R of these older wells also reduces the spider web effect created by historic development of single, vertical wells, resulting in more connectivity of wildlife habitat. Additionally, there will be an estimated 3.38 tons/year decrease in VOC due to the development of the Bypass and Denali.

Pending OGDPA approval from the COGCC, the Bypass and Denali locations would likely be constructed in Q1 2024. Drilling would commence in Q2 2024, and completions in Q3 2025. The anticipated production life of each well is 25-29 years for Bypass.

High Priority Habitat

The Bypass and Denali Locations are located within the half-mile buffer of a Bald Eagle Active Nest Site which is a CPW-mapped High Priority Habitat (HPH). Due to the direct disturbance of CPW-mapped HPH, PDC engaged 2DOT Consulting for an initial meeting at the proposed Locations to discuss options. Consultation with CPW occurred on site on 4/5/2022, during which PDC, 2DOT and CPW identified a bald eagle nest that was not previously mapped within state or federal databases. The newly identified nest was located within 0.50 mile of the two Locations and the nest was occupied. Direct line of sight between the Bypass Location and the bald eagle nest is disrupted by the stand of mature cottonwood trees harboring the nest.

Due to the presence of an active bald eagle nest in proximity to the Locations, consultation with the United States Fish and Wildlife Service (USFWS) Region 6 Migratory Bird Treaty Act Office was performed on 10/25/2022. The Service deferred operational and timing recommendations to the local authority. PDC contracted a third-party biological monitor for 12 weeks spanning from April 2022 to June 2022. Three juveniles were observed in the nest and had all fledged the nest by the first week of June. PDC intends to continue monitoring in 2022-2023 nesting season to determine nest status in advance of construction.

The Denali construction and drilling activities are currently planned to occur outside of the bald eagle nesting period (i.e., December 1 to July 31).

The Bypass construction and drilling activities are currently planned to occur from February 1st through August 15th, 2024. The COGCC, Colorado Department of Public Health and the Environment (CDPHE), and CPW agreed to this schedule on January 20, 2023. The commitments discussed during this meeting are below:

- PDC will drill both Bypass and Denali locations using an electrified rig
- PDC will not start construction until on or after February 1st
- PDC will not begin drilling with production rig until on or after May 1st
- PDC will begin drilling the eastern wells and then work towards the western string
- PDC will continue to monitor the eagle nest throughout all development
- PDC will add noise reduction BMPs for the access road

Best Management Practices

- PDC will use electric-powered drill rigs and production equipment rather than gas-fired engines.
- Produced water, gas, and oil takeaway via pipeline.
- Tankless hydrocarbon storage production facility
- Fresh water for completion operations via pipeline
- PDC will utilize a quiet frac fleet for completions operations
- Prior to the commencement of the pre-production activities of drilling and completions at the Bypass Pad, a partial perimeter wall consisting of 1,020 linear feet of 32 foot tall, engineered sound wall, rated at sound transmission class (STC)-32 will be installed along the east perimeter, as well as interior walls consisting of 120 linear feet located north of the pump down trucks (32 feet tall, STC-32), and two 80 linear foot sections west of the pump trucks (24 feet tall, STC-43) for completions operations compliance.
- Prior to the commencement of the pre-production activities of drilling and completions at the Denali Pad, a perimeter wall consisting of approximately 1,980 linear feet of 32 foot tall, engineered sound wall, rated at STC 32 will be installed even though there are no compliance point and unmitigated noise levels are below the MPNLs for COGCC Rule 423.
- Continuous noise monitoring will be conducted during all pre-production activities at the monitoring locations outlined within the ambient survey data and the individual location Noise Mitigation Plans.
- Air monitoring will be conducted as a baseline, during drilling, completions and the first 6 months of production
- A freshwater mud system will be used to drill and case the surface hole and Group III Oil Based Mud will be used for drilling of the production string
- During production, operations would typically only occur during daylight hours. No permanent lighting is anticipated on the sites during production operations
- PDC will use supervisory control and data acquisition (SCADA) systems to monitor well operations and pipes oil from the Location, which will reduce emissions from vehicle traffic due to the reduced number of vehicle trips to the site.
- PDC completes daily audio/visual observations at every active location which provides early detection of equipment malfunctions thereby minimizing emissions from leaks.
- As the Cameron 1 facilities age, PDC will use emission-less swab technology and controlled unloads to minimize emissions during maintenance activities.
- PDC will have permanent installations of advanced leak detection at both the Bypass and Denali facility pads, utilizing infrared cameras in conjunction with artificial intelligence. All leaks detected with this system will activate alarms in our field monitoring room where the facilities can be shut-in remotely.