



Caerus Piceance LLC  
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## **Extended Liberty Unit A18-495 Well Pad DUST MITIGATION PLAN**

### INTRODUCTION

Caerus Piceance LLC (Caerus) has developed the following Dust Mitigation Plan, which describes the methods Caerus may use to minimize and/or mitigate fugitive dust generated from the development of the proposed thirty-five (35) wells from the Extended Liberty Unit A18-495 Well Pad (ELU 18-495 Pad). Fugitive dust may be created during construction activities and from vehicular traffic on dirt or gravel roads. Also, fugitive dust can be propagated from the well Pad and gravel roads during high wind events. Application of dust control measures described below, minimizes the potential for adverse impacts from fugitive dust generated during development. This Dust Mitigation Plan is being submitted as required by COGCC Rule 304.c.(5) and further based on requirements outlined in COGCC Rule 427.

### WELL SITE LOCATION AND ACCESS

The ELU A18-495 Pad is a proposed oil and gas location to be constructed in Lot 3 (NWNW), Section 18, T4S-R95W, 6<sup>TH</sup> P.M., Rio Blanco County, Colorado. The proposed access road is an existing two-track road that will require some upgrading. The two-track is approximately 4,598-feet in length and 18 feet in width, which will support access to the ELU A18-495 Pad and connects to Sprague Gulch Road (BLM) located in the SWNE, Sec. 13, T4S-R96W. The Sprague Gulch Road is a BLM road and maintained yearly by Caerus. See the Access Road Map Topo B for a clear understanding of the proposed access route. The proposed access road leading to the ELU A18-495 Pad was evaluated in the Geologic Hazards report dated September 2, 2021. The surface soil of the road is "residuum weathered from shale with un-weathered bedrock 2 to 17 inches below the surface". Based on this evaluation there is no ground subsidence anticipated from daily usage. The access road will be inspected weekly and maintain accordingly.

### DUST MITIGATION

Caerus will employ the following methods to minimize and/or mitigate fugitive dust during construction, drilling, completion, and production operations associated with the development of the proposed wells on the ELU A18-495 Pad.

The existing two-track access road will be upgraded and maintained by Caerus in a manner that minimizes fugitive dust during all phases of development. The following describes the existing surface conditions, the anticipated usage of the existing and proposed roads, and the mitigation measures proposed to minimize and/or mitigate fugitive dust.



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## SOIL TYPES

Soil in the project area is described in Table 1, Soil Types within the Pad and access road boundaries. Please see the Natural Resources Conservation Service (NRCS) Map Unit Description for the soil type listed below for more details on the soil within the project area.

Table 1 – Soil Type within Pad and access road boundaries

Map Unit	Soil Series	Additional Information	Project Components
43	Irigul-Parachute complex, 5 to 30 percent slopes	Shrub Land	Soils are formed from residuum weathered from sandstone and shale. Occurs on mountainsides and ridges and is well drained.
58	Parachute loam, 25 to 75 percent slopes	Shrub Land	Occurs on mountaintops and ridges. Parent material is residuum weathered from sandstone.
87	Starman-Vandamore complex, 5 to 40% slopes	Shrub Land	No surface disturbing activities would occur on lands classified as prime farmland, fragile soil, or steep slopes.

**Speed Limits:** The speed limit for the Sprague Gulch Road is twenty-five miles per hour. The speed limit for the proposed two-track access road is twenty miles per hour. Caerus has implemented speed restrictions for all lease roads and requires all Caerus employees and contractors adhere to these posted speed restrictions.

**Total Soil Disturbance:** The total project disturbance for the ELU A18-495 Pad, pipeline installation, and access road is 26.8 acres. See the Surface Use Plan of Operations for a **detailed breakdown of the project disturbance.**

**Paved Access:** The BLM Sprague Gulch Road is not paved, and the proposed access road to the ELU A18-495 Pad will not be paved.

**Anticipated Truck Trips:** During each phase of development Caerus crews will utilize semi-trucks to haul heavy equipment to the locations and will utilize heavy duty pickup trucks to transport personnel and other lightweight materials to the proposed location. See Table 2, Anticipated Truck Trips, for a breakdown of the anticipated truck trips.

Table 2 – Anticipated Truck Trips

Development Phase	No. of Semi-Trucks	No. of Pickup Trucks	Total Truck Trips
Construction	150	135	285
Drilling	Rig Up - 110 Rig Down - 110	35 wellbores x 55 trips per wellbore = 1925	2145



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Completion	0	850	850
Interim Reclaim	40	160	200
Production	0	96	96
Total	410	3166	3576

**Fugitive Dust Suppression During Windy Conditions:** During dry and windy conditions Caerus construction crews will apply fresh water from an approved fresh water source to the disturbance area of the Pad, pipeline corridor or access road to minimize or mitigate propagation of fugitive dust. During periods of high wind events Caerus construction crews may temporarily suspend work to minimize potential for migration of fugitive dust, ensure worker safety, and to minimize impacts to public health, safety, welfare, the environment, and wildlife.

**Best Management Practices:** The following Best Management Practices will be utilized during development of the ELU A18-495 Pad to minimize or mitigate fugitive dust.

Pad and Access Road Construction – Fresh water will be periodically applied to disturbance areas during construction to minimize fugitive dust.

Construction During High Wind – The construction crew will monitor wind conditions during the site construction. When necessary, freshwater will be applied to dry soils during high wind events. Caerus will evaluate site conditions and may temporarily suspend ground disturbance activities to minimize fugitive dust.

Road Surfacing – The Sprague Gulch Road is a road maintained graveled as deemed necessary by BLM. The proposed access road will have six inches of road surfacing materials applied once constructed.

Speed Restrictions - Caerus has implemented speed restrictions on all lease roads and requires all employees and contractors to adhere to all posted speed restrictions.

Road Maintenance – During long-term production operations, Caerus will conduct annual inspections of the existing and proposed access roads and will perform maintenance as necessary to ensure road integrity and minimize fugitive dust. Road maintenance actions may include, but are not limited to spot graveling, storm water control maintenance and periodic watering of the road(s). Caerus prefers to utilize non-chemical-based dust suppressants wherever possible, but in instances where it becomes necessary due to high wind then Caerus may utilize magnesium chloride.

Site Visitation – Caerus will utilize telemetry equipment to minimize will site visitation, when possible, to reduce fugitive dust from vehicles traveling on the graveled roads.

Wildlife – There are no site specific COAs listed in the Final Environment Assessment, issued by the BLM Northwest District White River Field Office, November 2020. There are no riparian



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areas or aquatic wildlife in the immediate project area. The current raptor surveys for this site are valid until May 1, 2022. After this date WR-TL-15 would apply for all surface disturbing activities or re-surveying of this site concludes there are no active raptor nests in the project area.

Federal Requirements - Per Federal regulations, all access roads will be treated with water and/or a BLM approved chemical dust suppressant during construction and drilling activities so that there is not a visible dust plume behind vehicles. All vehicles will abide by company or public speed restrictions during all activities. If water is used as a dust suppressant, there should be no traces of oil or solvents in the water, and it should be properly permitted for this use by the State of Colorado. Only water needed for abating dust should be applied; dust abatement should not be used as a water disposal option under any circumstances.