



Surface Use Plan of Operations (SUPO)

Piceance Creek Unit Federal B27-197 (PCU FED B27-197)

FED Surface / FED Minerals

Lot 3, Section 27, Township 1 South, Range 97 West, 6th P.M., Rio Blanco County, Colorado

Revised North Parachute Unit COC 077039X

Federal Lease Nos.: COD 35729, COC 61715, and COC 62563

Piceance Creek Unit COC 047666X

Federal Lease No.: COD 35729

Total Mineral Acres Developed – 591.66:

FED Lease	FED Unit	FED Unit Tract #	Total Lease Acreage	Acreage Developed by Wells	Mineral Development Legal Desc.: all in Township 1 South, Range 97 West, 6 th P.M. Rio Blanco County, Colorado
COC 61715	RNPU	16	1952.05	338.59	Section 22: Lots 7-14 (338.59 acres)
COC 62563	RNPU	18	126.34	84.25	Section 27: Lots 1-2 (84.25 acres)
COD 35729	PCU	12	1896.45	168.82	Section 27: Lots 3-6 (168.82 acres)

Proposed Action:

Caerus Piceance LLC proposes to drill 22 Federal wells located on federal surface accessing federal minerals. APDs for the following wells located in the table below are being submitted:

Lease Number	Pad Name	Well Number
COD35729	PCU FED B27-197	PCU B27 FED 11A-27-197
		PCU B27 FED 11B-27-197
		PCU B27 FED 11C-27-197
		PCU B27 FED 11D-27-197
		PCU B27 FED 12A-27-197
		PCU B27 FED 12B-27-197
COC062563	PCU FED B27-197	RNPU B27 FED 21A-27-197
		RNPU B27 FED 21B-27-197
COC061715	PCU FED B27-197	RNPU B27 FED 13D-22-197
		RNPU B27 FED 14A-22-197
		RNPU B27 FED 14B-22-197
		RNPU B27 FED 14C-22-197
		RNPU B27 FED 14D-22-197
		RNPU B27 FED 15A-22-197
		RNPU B27 FED 15B-22-197
		RNPU B27 FED 15C-22-197
		RNPU B27 FED 24C-22-197
		RNPU B27 FED 24D-22-197
		RNPU B27 FED 25A-22-197
		RNPU B27 FED 25B-22-197
		RNPU B27 FED 25C-22-197
		RNPU B27 FED 25D-22-197



SECTION 1 – EXISTING ROADS:

Refer to “Access Road Map,” “Construction Layout Cross Sections,” and “Proposed Access Road” plats of the attached APD(s). The proposed access road is comprised of an existing access road which needs to be upgraded in addition to a portion of the road that will be newly constructed. The proposed length of the upgraded two-track road is approximately 4,736-feet. Where possible, Caerus will utilize a 30-foot-wide construction right-of-way. Caerus will construct an additional 2,455-feet of new access road that will connect to the existing two-track and the proposed PCU FED B27-197 Well Pad. Again, where possible, Caerus will utilize a 30-foot-wide construction right-of-way. Please see the “Proposed Access Road” plats for the engineered design of the access road to reduce slopes to a maximum of 8% grade, except for a small section of max 10% grade. Due to turnouts required, a consistent right-of-way width is not achievable. However, total acres of disturbance for the engineered road are noted by landowner on Sheet 2 of 2 of the “Access Road Map.” Finally, Caerus will re-route an existing two-track road, exiting the PCU FED B27-197 Well Pad on the southeast edge, which will provide continued access for the two-track road. The right-of-way dimensions of the re-routed portion of the two-track will be 240-feet in length with a 30-foot-wide construction width. Once all the roads are upgraded and constructed the road running surface width would be 18-feet wide, except in noted sections where 24-foot width is required for safety and grade. The upgraded and constructed access roads will support access to the PCU FED B27-197 Well Pad. Construction upgrading and maintenance of the access road will conform to standards outlined in the 2007 version of BLM and USFS “Surface Operating Standards for Oil and Gas Exploration and Development – The Gold Book.”

All equipment and vehicles will be confined to the access road, well pad and associated areas specified in the APD. Caerus will be responsible for continuous inspection and maintenance of the access road. Caerus will conform to a schedule of preventive maintenance, which at a minimum, provides for the below corrective measures on a biannual basis (Problem areas will be corrected as needed.):

- Road surface grading.
- Relief ditch, culvert cleaning, and cattle guard cleaning.
- Erosion control measures for cut and fill slopes and all other disturbed areas.
- Road closures in periods of excessive soil moisture to prevent rutting caused by vehicular traffic.
- Road and slope stabilization measures as required. The road shall be maintained to the standards required for the construction of the road until final abandonment and rehabilitation takes place.

SECTION 2 – NEW OR RECONSTRUCTED ACCESS ROADS:

Refer to “Access Road Map,” “Construction Layout Cross Sections,” and “Proposed Access Road” plats of the attached APD(s). The proposed access road is comprised of an existing access road which needs to be upgraded in addition to a portion of the road that will be newly constructed. The proposed length of the upgraded two-track road is approximately 4,736-feet. Where possible, Caerus will utilize a 30-foot-wide construction right-of-way. Caerus will construct an additional 2,455-feet of new access road that will connect to the existing two-track and the proposed PCU FED B27-197 Well Pad. Again, where possible, Caerus will utilize a 30-foot-wide construction right-of-way. Please see the “Proposed Access Road” plats for the engineered design of the access road to reduce slopes to a maximum of 8% grade, except for a small section of max 10% grade. Due to turnouts required, a consistent right-of-way width is not achievable. However, total acres of disturbance for the engineered road are noted by landowner on Sheet 2 of 2 of the “Access Road Map.” Finally, Caerus will re-route an existing two-track road, exiting the PCU FED B27-197 Well Pad on the southeast edge, which will provide continued access for the two-



track road. The right-of-way dimensions of the re-routed portion of the two-track will be 240-feet in length with a 30-foot-wide construction width. Once all the roads are upgraded and constructed the road running surface width would be 18-feet wide, except in the noted sections where 24-foot width is required for safety and grade. The upgraded and constructed access roads will support access to the PCU FED B27-197 Well Pad. Construction upgrading and maintenance of the access road will conform to standards outlined in the 2007 version of BLM and USFS "Surface Operating Standards for Oil and Gas Exploration and Development – The Gold Book."

The pad and access roads are situated on federal surface. By virtue of the leases committed to both the Revised North Piceance Unit and the Piceance Creek Unit, Caerus has authority to build an access road to access the proposed minerals. If any gravel is required to stabilize the access road, Caerus proposes to gather the gravel from the IHC Scott's White River Pit located at 41253 County Road 5, Meeker, CO 81641.

The following are directions to access the PCU FED B27-197 Oil and Gas Location: From Rifle, Colorado, proceed northerly along CR 13 approximately 17.4 miles to the junction of CR 5 and head northwest. Turn left and proceed in a northwesterly, then westerly, then northwesterly, then northerly, then northeasterly direction approximately 29.6 miles to the beginning of the proposed access road to the south. Turn right and proceed in a southerly, then northeasterly, then southeasterly direction approximately 1.4 miles to the proposed location, arriving at the PCU FED B27-197 Well Pad.

Total distance from Rifle, Colorado to the proposed well location is approximately 48.4 miles.

Please refer to Section 1 (Existing Roads) for maintenance plans and conformance standards.

SECTION 3 – LOCATION OF EXISTING WELLS:

See "Well Proximity Map."

WELL NAME	OPERATOR	QTR/QTR	SECTION	TOWNSHIP	RANGE
Yellow Creek Unit 51-2B	Caerus Piceance LLC	NWNW	28	1S	97W
Indian Wells Federal 22-1-97	Caerus Piceance LLC	NWSW	22	1S	97W
Water Well #36517-MH (Abandoned)	Solvay Chemicals Inc.	SENE	28	1S	97W

Geospatial data has been electronically sent concurrently to WRFO.

SECTION 4 – LOCATION OF EXISTING AND/OR PROPOSED PRODUCTION FACILITIES:

At the Oil and Gas Location, where drilling will occur, surface disturbance will be kept to a minimum. The well pad will be leveled using cut and fill construction techniques as noted in the PCU FED B27-197 Well Pad's "Construction Layout-Plan View," "Construction Layout Cross Sections," "Related Location & Flowline Map, Sheets 1-2," and "Pipeline Erosion Control, Plan, and Details" plats and in the PCU FED A27-197 CDP/Temp Frac Pad's "Construction Layout-Plan View," "Construction Layout Cross Sections," "Related Location & Flowline Map, Sheets 1-2," and "Proposed Pipeline Crossing" plats.

Should drilling result in established commercial production the following will be considered as the production facility layout after interim reclamation:



- Proposed location and attendant lines, by flagging, if located off the well pad.
- Dimensions of facilities.
- Construction methods and materials.
- Protective measures and devices to protect wildlife.
- All buried pipelines will be buried to a minimum depth of 3 feet, except at road crossings where they will be buried to a minimum depth of 4 feet. The maximum right-of-way (ROW) width for the pipeline route for the pipeline route heading from the PCU FED B27-197 Well Pad to the PCU FED A27-197 Central Delivery Point will be 80 feet wide – 60 feet “permanent” ROW with 10 feet on either side for construction (20 feet total temporary construction). The ROW disturbance will be minimized by co-locating pipeline installed in the same trench.
- Pipeline location warning signs shall be installed no later than 90 days after construction is completed.
- Caerus shall construct the pipeline ROW in a manner to preclude vehicular travel upon said ROW, except for access to pipeline drips and valves.
- During the drilling, completing, and production of the wells Caerus will co-locate pipelines in one ROW trench.
- The following are the proposed pipelines for this project:
 - Buried, up-to-12-inch, 3-Phase gathering pipeline that connects the PCU FED B27-197 well pad to the PCU FED A27-197 Central Delivery Point (CDP) that will deliver 3-Phase production consisting of natural gas, produced water and some condensate to the CDP. The proposed length of the 12-inch buried pipeline is 1,398 feet, with an 80-foot-wide total ROW (60-foot-wide “permanent” and 10 feet either side for temporary construction). 3-Phase separation for the production on the PCU FED B27-197 wells will occur at the PCU FED A27-197 CDP. Oil will be separated, metered, and collected in the tank battery at the CDP. The tank battery will serve as the measurement and sales point in which the BLM custody transfer, or FTP, will occur for the PCU FED B27-197 wells.
 - Buried, up-to-8-inch, remote frac pipeline connecting the PCU FED B27-197 well pad to the PCU FED A27-197 CDP. This pipeline will transport water for downhole operations during completion activities for the PCU FED B27-197 wells. The PCU FED A27-197 CDP will be utilized as a remote frac location during planned simultaneous drilling and completions operations. The proposed pipeline is 1,398 feet in length and planned to be co-located in the same 80-foot-wide total ROW (60-foot-wide “permanent” and 10 feet either side for temporary construction).
 - Buried, up-to-6-inch, gas lift/fuel line that will provide beneficial use gas to power artificial lift and production equipment. The proposed pipeline is 1,398 feet in length and planned to be co-located in the same 80-foot-wide total ROW (60-foot-wide “permanent” and 10 feet either side for temporary construction).
- The following are the proposed ROWs that Caerus will secure via separate BLM ROW application(s) in connection with the final disposition of natural gas and water transfer for the PCU FED B27-197 wells:
 - Buried, up-to-16-inch, natural gas pipeline connecting the PCU FED A27-197 CDP to the Hatch Gulch Receiver existing infrastructure tie-in point located in the NWSW of Section 28 T1S R97W. The proposed length of this ROW will be 8,168 feet in length with a total construction ROW width of 100 feet (60-foot-wide “permanent” and 20 feet either side for temporary construction, except for the section represented in the PCU FED A27-197 CDP/Temporary Frac Pad’s “Proposed Pipeline Crossing” plats where the entire 100-foot width will be utilized to bore under County Road 5 to tie into existing infrastructure). Approximately 5,881 feet are situated on BLM lands in the N2 of Section 27 and 28 T1S



R97W, and the remaining 2,287-feet of pipeline will reside on Caerus-owned fee lands. Please refer to the "Related Location & Flowline Map, Sheets 1-2". Natural gas will be transferred via existing, Caerus-operated infrastructure to a 3rd party midstream processing facility for compression and dehydration and final disposition. The Enterprise custody transfer meter is downstream of the Caerus-operated Black Sulfur Tank Battery located on the section-line in the center of Sections 16 and 21 T2S R97W. Please refer to "OGDP Map, Sheets 1-2". Measurement of gas at the PCU FED A27-197 will be the custody transfer and allocation point for all PCU FED B27-197 wells' gas.

- Buried, up-to-12-inch, produced water gathering pipeline connecting the PCU FED A27-197 CDP to the Hatch Gulch Receiver existing infrastructure tie-in point located in the NWSW of Section 28 T1S R97W. This proposed line will be co-located in the same, above-described ROW of 8,168 feet in length and with a total construction ROW width of 100 feet (60-foot-wide "permanent" and 20 feet either side for temporary construction, except for the section represented in the PCU FED A27-197 CDP/Temporary Frac Pad's "Proposed Pipeline Crossing" plats where the entire 100-foot width will be utilized to bore under County Road 5 to tie into existing infrastructure). Approximately 5,881 feet are situated on BLM lands in the N2 of Section 27 and 28 T1S R97W, and the remaining 2,287-feet of pipeline will reside on Caerus-owned fee lands. Please refer to the "Related Location & Flowline Map, Sheets 1-2". Final disposition of produced water will be one or more of the following options (Please refer to "OGDP Map, Sheets 1-2").:
 - to the Divide Road Water Treatment Facility in Section 26, T4S-R96W to be recycled for re-use in well completion operations,
 - to the Love Ranch 8 Pad & Evaporation Pit in Section 9, T2S-R97W for treatment, or
 - to existing injection wells or to-be repurposed for injection wells in Sections 1 and 12, T2S-R97W for disposal. If underground injection becomes necessary due to the above locations not being available to accept all volumes of produced water, a sundry will be submitted to the BLM for approval of the proposed wells to be utilized, along with relevant details typically requested in Section 4 of PWD of AFMSS.
- Buried, up-to-12-inch, water delivery pipeline to supply recycled water for remote frac operations, connecting the Hatch Gulch Receiver existing infrastructure tie-in point located in the NWSW of Section 28-T1S-R97W to the PCU FED A27-197 CDP. The proposed length of this ROW will be 8,168 feet in length with a total construction ROW width of 100 feet (60-foot-wide "permanent" and 20 feet either side for temporary construction, except for the section represented in the PCU FED A27-197 CDP/Temporary Frac Pad's "Proposed Pipeline Crossing" plats where the entire 100-foot width will be utilized to bore under County Road 5 to tie into existing infrastructure). Approximately 5,881 feet are situated on BLM lands in the N2 of Section 27 and 28 T1S R97W, and the remaining 2,287 feet of pipeline will reside on Caerus-owned fee lands. Please refer to the "Related Location & Flowline Map, Sheets 1-2".
- All disturbances will be reclaimed according to BLM and fee surface owner requirements.
- Caerus will request an Exception to WR-CSU-10 for its pipeline routing between the PCU FED B27-197 Well Pad and the PCU FED A27-197 CDP/Temporary Frac Pad. This is due to the fact that there is no efficient route between the two pads that does not intersect with slopes greater than or equal to 50%. Several routes were considered in pre-APD application consultation with



the BLM. Please see "Pipeline Erosion Control, Plan, and Details" plats. Also, see "Pipeline Routing Analysis" for Caerus' analysis of route options and rationale for the proposed route.

Caerus does not intend to place any production tanks at the PCU FED B27-197 well pad. Instead, produced water and condensate tanks will be situated at the PCU FED A27-197 CDP, where secondary containment will be constructed to hold up to 150% capacity of the contents in the largest single tank on the location per the Colorado Oil and Gas Commission Conservation Rule 603.o. Additionally, any tank containment areas will be lined with at least 24 mil impermeable liners per current COGCC regulations.

Caerus will have fifteen to twenty (15-20) 500 bbl temporary working tanks on location during Completions which will store produced water and flowback.

The PCU FED A27-197 CDP gathering facility will consist of water pumps, bulk 3-Phase separators, a custody transfer gas meter, a tank battery for oil storage and sales point, and water tanks for storage. The facility may include a generator and one or more liquid coolers.

For the PCU FED B27-197 well pad and the PCU FED A27-197 CDP the following requirements will be met:

- All permanent (onsite for six months or longer) above-the-ground constructed or installed facilities will be painted a color determined by BLM. All production facilities will be painted within six months of installation. Facilities that are required to comply with Occupational Health and Safety Act Rules and Regulations will be excluded from this painting requirement.
- If different production facilities are required, a sundry notice will be submitted to request approval to install.
- Run-off and sediment Best Management Practices will be implemented and maintained per Caerus' Stormwater Management Plan attached. The Well Pad will have a berm built around entire location. Any road or pad maintenance will typically occur during a dry season, likely in the late spring to early summer (mid-April – late-July).
- Caerus shall protect all survey monuments, witness corners, and reference monuments against disturbance during construction, operation, maintenance, and termination of the facilities authorized herein.

Caerus shall immediately notify the authorized officer if any corners, monuments, or markers are disturbed or are anticipated to be disturbed. If any monuments, corner, or accessories are destroyed, obliterated, or damaged during construction, operation or maintenance, Caerus shall secure the services of a Registered Land Surveyor to restore the disturbed monuments, corner, or accessories, at the same location, using surveying procedures found in the Manual of Surveying Instructions for the Survey of the Public Lands of the United States, latest edition. Caerus shall ensure that the Registered Land Surveyor properly records the survey in compliance with the Colorado Revised Statutes 38-53-101 through 38-53-112 (1973) and shall send a copy to the authorized officer.

During drilling and subsequent operations, all equipment and vehicles will be confined to the access road ROW and any additional areas as specified in the approved Application for Permit to Drill.

Reclamation of disturbed areas, no longer needed for drilling/completion operations, will be accomplished by grading, leveling, and seeding as recommended by the Bureau of Land Management.

Caerus will be responsible for road maintenance from the beginning to the end of the well pad's life.



SECTION 5 – LOCATION AND TYPES OF WATER SUPPLY:

Fresh water will be used for drilling these wells will be transported via trucking. The water origin point for operations will be delivered from the Exxon Love Ranch Reservoir (WD ID# 4303772) POD Lat/Long 39.891364/-108.291628 and from the Exxon B&M Reservoir (WD ID# 4303774) POD Lat/Long 39.848892/-108.250869. Water will be hauled via truck to the PCU FED B27-197 well pad for drilling operations. Please refer to “Water Source and Transportation Map” and “Road Description” plats.

Caerus estimates that the amount of water used for construction, drilling and initial dust abatement is 9,500 bbls fresh water per well. Caerus does not anticipate using freshwater for dust abatement, but if necessary, an estimated 1,000 bbl water/day for dust control may be utilized.

During active drilling and completion operations Caerus recycles roughly 85-95% of produced water generated from Caerus operated wells. Recycled water is the primary source of water utilized for downhole operations.

For the PCU FED B27-197 wells’ completions operations, Caerus will use recycled water treated from the following sources, which will deliver the recycled water to the project locations via existing pipeline infrastructure and the proposed water delivery line discussed above in Section 4 (Proposed Production Facilities):

- Divide Road Water Treatment Facility (ID #432214),
- North Parachute Ranch EP Waste Mgmt (ID #120803), and
- High Mesa Evap Ponds (ID #149013).

Caerus estimates the volume of recycled water used for completions operations is ~385,000 bbls of water per well.

For additional water use plans please reference Caerus’ Water Plan.

SECTION 6 – CONSTRUCTION MATERIALS:

All necessary materials for earthwork construction are naturally situated on this location. Caerus does not anticipate the need to borrow any materials from another location. Pad and access road construction will be balanced cut/fill earthwork quantities; there will be no import earthwork material. Surface gravel aggregates will be imported from IH Scott’s White River Pit, a permitted commercial gravel pit located at 41253 County Road 5, Meeker, CO 81641.

SECTION 7 – METHODS FOR HANDLING WASTE DISPOSAL:

Drill cuttings generated during drilling of the proposed wells will be contained temporarily in bins managed on the pad surface in a cuttings management area. The cuttings will then be hauled off for disposal at the Greenleaf Disposal Site located 7.6 miles south of the town of Debeque. Please refer to the “Cuttings Disposal Haul Route Map.” If better terms can be negotiated, cuttings and/or other appropriately defined waste may be trucked to Wray Gulch Disposal Site located 15.3 miles north of location.

Western Colorado Waste Inc., P.O. Box 26, Mack, CO 81525 provides roll-off dumpsters and portable toilets. The location will have 1-2 40-yard closed top container that will be emptied weekly. There will be



1-2 portable toilets that will be serviced weekly. All trash and porta potty liquids will be disposed of at Garfield County Landfill, 0075 CR 246, Rifle, CO 81650, (970) 625-2516.

Stallion Oilfield Services, 240 Cactus Rose Lane, Rifle, CO 81650 provides housing, water, and sewer services. All housing units have full bathrooms. All grey water is treated and stored in 2000-gallon wastewater storage tanks. This water is picked up every four days and disposed of at the City of Rifle Water Treatment System. All water hauling of potable and non-drinking water is under the State of Colorado PWSID Permit # CO00223729, which allows Stallion to operate as a potable water delivery operator. Water is purchased from the Town of Parachute, CO at Red Point LLC, 808 CR 215, Parachute, CO 81635. The following equipment will be on either or both PCU FED B27-197 well pad and PCU FED A27-197 CDP locations:

- 3 - Climate Controlled 3000-gallon potable water tanks
- 5 - 2000-gallon wastewater storage tanks
- 2 - 40-yard closed top roll-off dumpsters
- 2 - Portable Toilets

SECTION 8 – ANCILLARY FACILITIES:

Ancillary facilities for centralized gathering, metering, and separation of natural gas, oil, produced water and some residual condensate will occur at the PCU FED A27-197 CDP. The PCU FED A27-197 will also serve as the remote completions support pad location during the completions phase of the PCU FED B27-197 wells.

Production from each of the twenty-two (22) wells associated with the PCU FED B27-197 Oil and Gas Location Pad will flow through its own individual 3-Phase meter, located at each wellhead on the well pad. After flowing through this meter, natural gas, produced water, and oil from the individual well will commingle with the other wells on this pad into a common pipeline, of a buried, up-to-12-inch pipeline which will transport the commingled production to the PCU FED A27-197 CDP. At the CDP, the 3-Phase separator will separate oil, natural gas, and produced water. Oil and condensate will be measured at the LACT meter at the CDP, which is allocated back to each well using each well's proportionate share of total oil/condensate transported to the CDP based on each well's 3-Phase meter reading at the wellhead. Natural gas will flow from the separator, through an AGA approved custody transfer meter, which will then flow to the Hatch Gulch Receiver existing infrastructure tie-in point located in the NWSW of Section 28 T1S R97W, which is approximately 8,168 feet of pipe length west of the PCU FED A27-197 CDP. Gas from the AGA approved custody transfer meter will be allocated back to each well, based on each well's percentage of the total gas production from the PCU FED A27-197 CDP.

In addition to serving as a central collection and allocation point, the PCU FED A27-197 CDP will also serve as a remote frac location which will serve to handle flowback generated from the wells on the PCU FED B27-197 well pad. Recycled water will be pumped from Caerus-operated water recycling infrastructure via the sources discussed above in Section 5 (Water Supply) to the PCU FED A27-197 CDP, where all fracturing equipment will be staged. Pumps, tanks, generators, separators, and other equipment will occupy the PCU FED A27-197 CDP which will serve multiple multi-well pads. During fracturing operations, high pressure water will be pumped from the PCU FED A27-197 CDP to the PCU FED B27-197 well pad.

After completion activities, a workover rig will be mobilized to the PCU FED B27-197 Pad to install tubing in all of the wells for long term production.



Note, future contemplated, additional well pad locations in the Piceance Creek Unit or Revised North Parachute Unit may also be collected at the PCU FED A27-197 CDP at a later date as wells are drilled and completed in the area. The potential, future contemplated well pads may not be drilled until 2026 or 2027 to allow Caerus opportunity to watch production results as well as not overpressure gas and water infrastructure with all of the development at once. Caerus does not want to risk OGD/permit expirations, so those locations are not included in this application. However, those potential, future contemplated locations have been on-sited with the BLM and may be considered in the BLM's NEPA analysis. Those locations include the "H28-197" well pad, which will utilize the PCU FED A27-197's temporary frac pad for support, and the "K27-197" well pad with its associated "O27-197" temporary frac pad.

SECTION 9 – WELL SITE:

See Well Location Plat for each well (associated with APD)
See Surface Use Disturbance Summary Plat
See Construction Layout-Plan View and Construction Layout Cross Sections
See Preliminary Drill Rig Layout
See Flowback Equipment Layout
See Interim Reclamation Production Schematic
See Interim Reclamation Cross Sections and Interim Reclamation Plan
See Final Reclamation Cross Sections and Final Reclamation Plan
See Directional Well Plat and Multi Well Plan Plats (Multi-Well Diagram)
See Location Drawing for both the PCU FED A27-197 CDP and the PCU FED B27-197 well pad
See Access Road Map
See Proposed Access Road Plats (engineered road design)
See Road Description for directions to the PCU FED B27-197 Well Pad
See Well Proximity Map (One-Mile Radius)
See Cuttings Disposal Haul Route Map
See Water Surface & Transportation Map
See Related Location & Flowline Map
See Erosion Control, Plan, and Details Plats
See Pipeline Routing Analysis
See Hydrology Map

SECTION 10 – PLANS FOR SURFACE:

Interim Reclamation

Caerus will request an Exception related to the timing of Interim Reclamation to commence at the PCU B27-197 Well Pad within 24-months of setting the last conductor for the twenty-two (22) wells. Both the PCU A27-197 CDP and the PCU B27-197 Well Pad will require two build seasons due to the length of the proposed roads and pipelines. Caerus typically constructs in the fall when federal and CPW wildlife stipulations allow and when the ground is the most stable for construction. Caerus will adhere to the WRFO BLM's Big Game Timing Limitation (WR-TL-12) for no construction to occur between December 1st and April 30th. Therefore, Caerus will require two build seasons to comply with wildlife timing stipulations and to build the locations in suitable weather. Furthermore, the PCU A27-197 CDP will serve as the central delivery point for the PCU B27-197 Well Pad and two additional well pads (mentioned in Section 8 – Ancillary Facilities) that will be permitted in the future. In addition, the PCU A27-197 CDP will



serve as a remote frac location for the PCU B27-197 Well Pad and the yet to be permitted PCU FED H28-197 Well Pad. Lastly, the PCU A27-197 CDP will be upgraded with additional facilities and equipment to accommodate the additional production coming to the CDP from the yet to be permitted PCU K27-197 Well Pad. Commencing interim reclamation in between these activities would be futile because the reclaimed area would again need to be utilized for the activities described above and detailed in the chart below.

Project Name	Operational Phase	Scheduled to Occur	Interim Reclamation Duration Requested
PCU B27-197 Well Pad	Construction	Q3-Q4 2023 and again Q3-Q4 2024	36-months from setting conductors
PCU A27-197 CDP	Construction	Q3-Q4 2023 and again Q3-Q4 2024	48-months from initial build
PCU B27-197 Well Pad	SimOps (D&C)	Q4 2024 – Q4 2025	See above
PCU A27-197 CDP	Remote Frac for B27-197	Q1 2025 – Q4 2025	See above
PCU H28-197 Well Pad*	Construction	Q3-Q4 2025	18-months from setting conductors
PCU H28-197 Well Pad*	SimOps (D&C)	Q1 2026 – Q4 2026	See above
PCU A27-197 CDP	Remote Frac for H28-197	Q2 2026 – Q4 2026	See above
PCU K27-197 Well Pad*	Construction	Q3-Q4 2026	18-months from setting conductors
PCU K27-197 Well Pad*	SimOps (D&C)	Q3 2027 – Q3 2028	See above
PCU A27-197 CDP	Install add'l facilities to accommodate K27-197 production	Q3 2027	See above

*Indicates permits pending submittal to both BLM and COGCC

Unless otherwise directed by the BLM, rocks, cut vegetation, and other surface material temporarily stockpiled during construction are redistributed as backfill on the project area and blended into the natural landscape. The segregated topsoil is then spread evenly across the reclaimed areas. Due to the amount of soil moved around the site during reclamation, perimeter sediment controls such as wattles or diversion ditches will need to be implemented if not present already.

Once all topsoil has been distributed across the site, the location is then seeded by drill seeding methods or broadcast seeding. The recommended seed mix for revegetation on the PCU FED B27-197 surface has been provided by the BLM WRFO and is attached to the submitted APDs. All reclaimed areas except areas needed for production will be seeded. All areas needed for production will be graveled. The Pad boundary will be fenced per surface owner request.

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. Whenever possible, seeding is timed to take advantage of moisture, such as early spring or late fall.

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. Drilling will be used where topography and soil conditions allow operation of equipment to meet the seeding requirements of the species being planted while steeper areas are broadcast seeded. Steeper areas will be assessed to determine if additional BMPs are needed to stabilize the soil until vegetation develops.



If necessary, in areas of concentrated surface flow, turf reinforcement mats and erosion control blankets will be employed to help facilitate vegetative growth.

Final Reclamation

Unless otherwise directed by the WRFO BLM, the following standards will apply to final reclamation:

- Re-contouring: Unless an agreement is made with the landowner to keep the road and/or pad in place, the disturbed areas surrounding the well location, including the access road will be recontoured to blend as nearly possible with the natural topography. Final grading of backfilled 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.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The marker will be constructed after contouring. The top of the marker will be closed or capped, and the following minimum information will be permanently placed on the marker with a plate, cap or beaded-on with a welding torch: "Fed" or "Fee", as applicable; "well number, location by quarter, quarter section, township and range"; and "lease number".

SECTION 11 – SURFACE OWNERSHIP:

Bureau of Land Management – White River Field Office
220 E Market Street
Meeker, CO 81641

Attention: Tim Barrett, Natural Resource Specialist

Refer to "Construction Layout Plan View" and the "Access Road Map" for more details. The well pad and all production facilities are located on federal surface managed by the WRFO – BLM.

SECTION 12 – OTHER:

WRFO is requiring a new 40-acre cultural survey for the PCU FED B27-197. This survey is complete. Should the BLM require it, a paleontological monitor will be present when the pad construction activities begin to observe and monitor bedrock/formation rock disturbance. This location has a lot of thick brush and shrub growth.

Through the annual site visits, noxious and invasive weeds will be identified, inventoried, and treated by licensed contracted herbicide applicators. Caerus will monitor, control, and reduce the spread of noxious and invasive weed species as determined in the Colorado Noxious Weed Act and rules pertaining to the administration and enforcement of the Colorado Noxious Weed Act. Success will be achieved when minimal noxious weeds exist, and native vegetation dominates the area reclaimed during interim reclamation activities which will be evaluated during annual site visits.

Caerus Piceance LLC estimates it will cost \$510,065 dollars to complete final reclamation which includes the PCU FED B27-197 well pad, access roads, and associated pipelines.



Other Environmental Considerations:

RESOURCE/ ENVIRONMENTAL ISSUE	POTENTIAL IMPACTS		COMMENTS
	YES	NO	
AIR QUALITY		X	All equipment and infrastructure complies with COGCC and CDPHE air quality regulations for an APEN or permitting.
CHEMICAL MANAGEMENT		X	All chemical management complies with COGCC, CDPHE and SARA Title III reporting requirements, including MSDS sheets for all chemicals used in Caerus Piceance, LLC operations.
CULTURAL OR PALEO RESOURCES PRESENT	TBD	TBD	BLM WRFO requires paleo monitor on location during pad construction.
GROUNDWATER		X	Drilling plans comply with COGCC ground water protection regulations.
MINERALS - FEDERAL		X	22 APDs submitted herein comply with 43 CFR 3160, et. al. and associated Onshore Orders and guidance.
MINERALS - STATE AND COUNTY		X	APDs will be submitted to the COGCC for State Approval in accordance with COGCC Title 34 regulations once the OGDG has been approved. Any SUP or other county requirements will be complied with.
NEPA		X	The proposed actions may qualify for categorical exclusion which will be determined by WRFO.
NOISE		X	Noise thresholds as established by the COGCC will be complied with in accordance with State Title 34 regulations.
NOXIOUS WEEDS	TBD	TBD	This location will be added to the noxious weed management plan
RECLAMATION		X	The PCU FED B27-197 well pad is on surface managed by WRFO-BLM
SPILLS	TBD	TBD	All spills will be managed in accordance with Federal (NRC, BLM, et. al.), state (COGCC, CDPHE, CDOT) requirements, including notification, reporting, response, and remediation actions. The appropriate level of notification will depend upon the waste classification as an E&P, or non-E&P waste, as defined by EPA regulations.
VISUAL RESOURCES		X	The area is in a Class II area and the surface location is located entirely on WRFO-BLM.
WASTE		X	All E&P wastes, including drilling cuttings, produced water; frac water, etc. will be managed in accordance with Federal (BLM) and COGCC regulations. Non-E&P wastes will be managed in accordance with EPA and CDPHE regulations.
WATER – 404 LOCATIONS		X	N/A
WATER – GENERAL / NPDES / WATER RIGHTS		X	Any NPDES discharge permits (if needed) and water rights obligations will be complied with under state COGCC, CDPHE and SEO regulations.
WATER - SPCC		X	All SPCC locations with comply with 40 CFR 112.
WATER-STORMWATER		X	Stormwater is addressed under a field-wide Stormwater Management Plan (CDPHE Certification #COR400000 for North Parachute). Additionally, please see the plan specific to the location attached.
WILDLIFE-NON-GAME AND TE&S (INCLUDES RAPTORS)		X	
Raptors	TBD	TBD	At the on-site a raptor survey was discussed and will be complied with per any applicable COAs.



Surface Use Disturbance Summary (See attached map of the same name):

Project Surface Disturbance (Acres)						
	Private		BLM-USDA FS		Totals	
<i>New Disturbance</i>	<i>Total</i>	<i>Long-Term</i>	<i>Total</i>	<i>Long-Term</i>	<i>Total</i>	<i>Total Long-Term</i>
PCU FED B27-197 Well Pad	0	0	7.355	2.080	7.355	2.080
PCU FED B27-197 Access Roads	0	0	0	0	0	0
PCU FED B27-197 Pipeline R-O-W	0	0	1.926	0	1.926	0
Subtotal	0	0	9.281	2.080	9.281	2.080
<i>Existing Disturbance</i>	<i>Total</i>	<i>Long-Term</i>	<i>Total</i>	<i>Long-Term</i>	<i>Total</i>	<i>Total Long-Term</i>
PCU FED B27-197 Access Road	2.995	2.995	10.488	10.488	13.483	13.483
Subtotal	2.995	2.995	10.488	10.488	13.483	13.483
<i>Re-Routed Disturbance</i>	<i>Total</i>	<i>Long-Term</i>	<i>Total</i>	<i>Long-Term</i>	<i>Total</i>	<i>Total Long-Term</i>
PCU FED B27-197 Access Road	0.00	0.00	0.165	0.165	0.165	0.165
Subtotal	0.00	0.00	0.165	0.165	0.165	0.165
TOTAL DISTURBANCE	2.995	2.995	19.334	12.733	22.929	15.728

Operator Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

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