



Caerus Oil and Gas, LLC
Operator # 10456

Chevron 22D-17L (Deep Well Pad)
Final Reclamation Plan

Location ID#: 324425

NESW Section 17 T6S R96W
Garfield County

Site Description:

The initial disturbance for the Chevron 22D-17L (Deep Well Pad) well pad and access road occurred in 2007. The disturbance is on Fee Surface with Fee minerals. The site elevation is 5,657 feet. The well is scheduled to be plugged in summer/fall 2018 and final reclamation of the well pad and access road will follow. Final reclamation will be completed by September 30, 2018.

Soils Description:

The USDA National Soils Cooperative website was used to identify boundaries of the soils mapping units. The well pad falls within the Torriorthents-Camborthids-Rock outcrop complex with steep slopes. The soils are classified as well drained with high runoff potential.

Pre-Disturbance Vegetation Composition:

The dominant vegetation community in the lease area can be characterized as Low Elevation Salt-Desert Shrub/Basin Big Sagebrush.

Known Weed Infestations:

There are no known or identified Colorado list A or B weed infestations at this location.

Management of Waste Material:

Qualified Environmental personnel have completed a site assessment for identifying soil impacts resulting from current and historic activities on the pad. There was a historical pit on location what was closed per COGCC regulation by PDC in 2013.

Upon approval the clean (per COGCC Table 910 standards) PC5A cuttings will be moved to this pad for final placement as beneficial reuse. The cuttings will be buried at least 3 feet below the surface.

Gathering Lines:

All gathering lines will be abandoned and removed.

Access Road:

The access road from the Chevron 22D-17L to the access of the PC4 will be recontoured and fully reclaimed. Stormwater controls will be installed as needed.

Well Pad Recontouring:

Reclaimed topographic conditions should be similar to pre-disturbance conditions as described in the pre-construction, site specific document and the surveyor plats. The reclaimed landscape should blend with the surrounding contours, historic hydrology should be restored and erosion control BMPs should be installed to prevent stormwater discharges from the disturbance. The topsoil should be spread at appropriate depths to the geographic topography. In most cases, to a depth of 4 to 6 inches (or if topsoil is scarce, as deep as possible) across the disturbed areas.

Any available gravel will be stripped from the pad surface and used on adjacent roads.

Upon approval, clean cuttings from the PC5A will be moved and placed in the cut slope at the location where the tank containment and well heads, previously existed.

Vegetation will be scraped and, along with any available topsoil, will be segregated and stored separately during recontouring. The topsoil will be placed back on the surface of the reclaim prior to seeding. A run-on berm will be placed at the top of the cut slope. The fill slope will be brought back in and up to fill the cut areas. The original landforms and drainage pathways will be restored to blend with the native landform and as nearly as practicable to the pre-disturbance condition. A run-off ditch will be placed at the toe of the slope, at the north edge of the PC4 pad surface, to direct stormwater flows to a sediment basin at the edge of the PC4. Tiered sediment basins will be installed above the PC4 well pad to collect any stormwater runoff. Extra care will be given to avoid disturbing the drainage on the southeast edge of the reclaim.

Prior to seeding a follow-up review of the landforming will be scheduled with the Chevron Ranch Manager, to verify that the landforming aligns with Chevron's land use objectives.

Chevron would like the well head plate buried rather than a surface dry hole marker.

Re-establish and Stabilize Drainage Features:

The goal for stormwater management on this location will be to stabilize soils, prevent excessive erosion, soil instability, subsidence and or slumping. Landforming and successful vegetation will be employed as the best management practices to achieve these goals. Site specific BMPs will be installed at the direction of the construction department and in coordination with the Chevron Ranch Manager.

Seedbed Preparation and Seeding:

Seed beds will be prepared by surface roughening prior to seeding activities. Seeding will take place within 24 hours of completion of the seed bed preparation, weather permitting. Amendments for this reclaim area shall include: 2000 lbs./acre Richlawn 3-6-3™ organics and 3500 lbs./acre Biotic Earth™ topsoil replacement and growth medium. Crimped straw mulch shall be applied for soil moisture retention and stormwater stabilization. A natural, fiber mulch (hydraulically applied) may also be utilized for areas that are too steep to drill seed and crimp.

Seed will be certified weed free and pure live seed rated per BLM standards. Seed weight will be calculated in pounds per acre. Seed tags need to be submitted with the seed report form. Seeding may need to be repeated until successful. Caerus will monitor and ensure successful vegetation establishment.

Establish desired self-perpetuating plant community:

The following seed mix is the proposed mix for the Chevron 22D-17L well pad and access road. Caerus respectfully requests verification of the desired seed mix from the Chevron Ranch Manager. The estimated area to be reclaimed is approximately 4 acres. The recommended seed rate will depend on the final seed mix selections.

Final Reclamation – Chevron 22D-17L Seed Mix

Common Name	Variety	Growth Form	Forage Value*	% of Mix	Required PLS lbs./acre to nearest 1/4lb**
Crested Wheatgrass <i>Agropyron cristatum</i>	Ephraim	Bunchgrass		17	2
Western Wheatgrass <i>Pascovvrum smithii</i>	Arriba	Sod Forming Grass	M	35	4
Slender wheatgrass <i>Elymus trachycaulus</i>	Primar	Bunchgrass	H	18	2
Indian ricegrass <i>Achnatherum hymendoides</i>	Nezpar	Bunch grass	H	20	2.25
Alkali sacaton <i>Sporobolus airoides</i>	VNS	Bunchgrass	M	2	0.25

Scarlet globemallow <i>Sphaeralcea coccinea</i>	VNS	Forb	H	4	0.5
Prairie Junegrass <i>Koeleria macrantha</i>	VNS	Bunchgrass	H	2	0.25
Blue gama <i>Bouteloua gracilis</i>	Native	Sod Forming grass	H	2	0.25
				100	11.5

Fencing:

Initial fencing is not planned for this Final reclaim area. Fencing may be evaluated in cooperation with Chevron Ranch Manager in cases of grazing impact to reclaim that impacts reclamation success.

Manage Invasive Plants:

Through annual site visits, noxious and invasive weeds will be identified, inventoried and treated by licensed contracted herbicide applicators or mechanically removed. Caerus will monitor, control and reduce the spread of noxious and invasive weed species within Caerus's disturbances as determined in the Colorado Noxious Weed Act and rules pertaining to the administration and enforcement of the Colorado Noxious Weed Act.

Reclamation Monitoring and Reporting:

State regulations and Caerus's Best Management Practices require routine site visits and active management over construction activities, along with annual reclamation reporting requirements. For compliance with Colorado Department of Public Health and Environment (CDPHE) Stormwater rules, the location will be visited every 14 days during active construction and monthly thereafter until the vegetation has reached 70% cover of pre-disturbance levels, with the focus on stabilizing the site post-construction. Annual inspections (at a minimum), will then take place on the location, for compliance with COGCC, until the location reaches 80% pre-existing vegetative cover. Focus for this phase will be to further stabilize soils, preventing erosion and site degradation, and to monitor for and treat invasive species.

Once it is determined that the final reclamation has reached the 80% cover (for COGCC), and the location shows visible signs of sustainability, trending towards overall success criteria (multi-species diversity with good forb and shrub component present) additional monitoring will be done to qualify the site for bond release.

Chevron 22D-17 Final Reclamation

