



INTERIM RECLAMATION PLAN

**Submitted with Form 2A Application for
Cosslett East 22H-H168**

**Plan Date: July 6, 2021
Submitted: July 13, 2021
Resubmitted: September 10, 2021**

**The attached Interim Reclamation Plan was developed in accordance
with COGCC Rule 1003.**

INTERIM RECLAMATION PLAN DETAIL	
Location Name	COSSLETT EAST 22H-H168
Legal Description	NE 1/4 SECTION 22, T1N, R68W, 6TH P.M
Coordinates (Lat/Long)	40.039835 / -104.984623
County	Weld

Introduction

This interim reclamation plan (Plan) was prepared by Confluence Compliance Companies, LLC (Confluence) to support Crestone Peak Resources Operating, LLC (Crestone) Form 2A oil and gas permitting efforts on the above referenced project site (Location). The Plan includes a description of the Location, a site-specific interim reclamation procedure and monitoring plan, management strategy for undesirable plant species and noxious weeds, and a list of site-specific interim reclamation best management practices (BMPs).

Location

Site Description

The Location includes the drilling and construction footprint associated with the well and facility development of the Cosslett East 22H-1h168 Well Site. Total surface disturbance associated with the development will be 27.0 acres. After drilling and completion operations are finished, 10.6 acres of the well pad and access road will be stabilized for long-term operation of the Location, while 16.4 acres will be interim reclaimed through compaction alleviation, recontouring, topsoil distribution, and disturbance preparation for return to cropland.

The Location is within Ecological sites R067BY002CO - Loamy Plains and R06BY042CO – Clayey Plains, on private land historically utilized for crop cultivation. The Location has an elevation of approximately 5,189 feet above sea level, receives an average of approximately 16 inches of precipitation annually, and has 0-2% slopes with easterly aspect. The nearest Receiving Water is Stanley Ditch, located approximately 1,280 feet southeast. There are no pre-existing drainages identified within the disturbance area.

Soil Description

The Location spans three Soil Mapping Units, including Weld loam, Ulm clay loam, and Nunn clay loam, and are described as follows.

Weld loam Unit

- The A horizon of the Weld loam Unit is typically a loam soil texture with nonsaline to very slightly saline properties and a maximum sodium adsorption ratio of 5.0.
- The B horizon ranges from clay loam and silt loam to clay and loam textures.
- The C horizon is typically a silt loam soil texture.
- These soils are well drained with a medium runoff class and high available water capacity.

- Depth to a restrictive feature or water table is more than 80 inches.

Ulm clay loam Unit

- The A and C horizons of the Ulm clay loam Unit are typically a clay loam soil texture.
- The B horizon is typically a clay texture.
- These soils are well drained with a low runoff class with nonsaline to very slightly saline properties.
- Depth to a restrictive feature or water table is more than 80 inches.

Nunn clay loam Unit

- The A and B horizons of the Nunn clay loam Unit are typically a clay loam soil texture.
- These soils are well drained with a medium runoff class and high available water capacity.
- Nunn clay loam typically has nonsaline to very slightly saline properties and a maximum sodium adsorption ratio of 5.0.
- Depth to a restrictive feature or water table is more than 80 inches.

Pre-Disturbance/Reference Area Vegetation

The Location is within non-irrigated cropland most recently cultivated with wheat crops. The adjacent reference area is south and west of the Location, has similar soils, slope, aspect, and historical land use.

Access Road and Gathering Lines

The Location will be accessed via the existing Cosslett B Unit /61N68W 22SENE location and associated access road. Preexisting gathering lines and flowlines present at the existing location will be removed and new lines will be installed. All flowline disturbances will be incorporated into the graveled working surface of the Location for long-term operation. All gathering line disturbances will be reclaimed per the Reclamation Procedure described below.

Removal of Debris and Management of Waste Materials

All non-exploration and production (E&P) waste, drill cuttings and fluids, waste material, and debris will be removed, as detailed in the associated Rule 304.c.(11) Waste Management Plan. Following drilling and well completion operations, all cellars, rat holes, and other boreholes will be backfilled.

Reclamation Procedure

The following procedure details site-specific interim reclamation best management practices (BMPs) that will be implemented following drilling and well completion operations. Reclamation will be completed per standard operating procedures of Crestone's construction and reclamation team with BMPs such as amendment application, contouring/grading, fence installation, and landscaping being completed based on site-specific conditions and applicable agreements with

local governments. Any deviation from this procedure will be coordinated with Crestone's Civil Inspector and if necessary, with local governments, regulatory agencies, and the surface owner.

Pad Size Reduction

During the first favorable season within three months after the wells are completed for production, gravel/road base will be removed from the drilling and construction footprint and the pad area reduced to the size necessary for long-term operation of the Location.

Recontouring and Subsoil Preparation

After gravel and road base removal, subsoils will be cross-ripped to a depth of 18 inches to alleviate compaction and promote root growth. Recontouring will occur to replace soils to their original relative positions and to level ripped soils. Recontouring will include all edges of the disturbance to ensure the reclamation surface matches pre-disturbance grade. Any preexisting drainage features will be reestablished, and subsoils will be packed to ensure proper density for root establishment prior to topsoil application. Topsoil will not be comingled with subsoil materials during recontouring and subsoil preparation operations.

Seedbed Preparation

Salvaged topsoil will be redistributed throughout the interim reclamation area to the depth of pre-disturbance conditions and final contouring will occur to match pre-disturbance topography. Seedbed preparation will proceed via disking to ensure that proper grade, soil texture and bulk density is achieved to support the return to crop cultivation by the surface owner.

Soil Amendments

The following amendments will be applied via broadcasting equipment to maximize the capability of the disturbance area to support uniform reestablishment of crops:

- 750 lbs. per acre of Mesa Verde brand humates.
- 500 lbs. per acre of Richlawn 3-6-3 organic fertilizer with mycorrhizae and humates.

Erosion Control

Following pad size reduction, drainage swales will be installed along the south and east perimeters of the well and facility pad to divert stormwater runoff from the working surface. Drainage swales will discharge into a detention pond on the southeast perimeter of the pad.

Reclamation Monitoring Plan

The reclaimed surface will be routinely monitored by Crestone personnel and stormwater inspectors for establishment of crops, presence of undesirable and noxious weeds, and soil erosion. When the pad surface is permanently stabilized for production and the reclaimed area achieves final stabilization requirements as identified in the CDPHE General Construction Stormwater Permit formally documented stormwater inspections will cease, though informal stormwater inspections will continue throughout the life of the Location.

Following stormwater permit closure, the Location will be incorporated into Crestone's long term reclamation monitoring program. During this phase, Crestone personnel will continue routine monitoring and reclamation assessments will be conducted during the growing season. Any identified maintenance tasks relating to revegetation success, soil degradation/erosion, or weed establishment will be coordinated with the surface owner and completed. Annual monitoring will continue until crops are reestablished with uniform distribution and height matching reference areas. An interim reclamation completion notice will then be submitted with associated photos and descriptions of reclamation procedures via a Sundry Notice (Form 4). The interim reclaim will continue to be monitored by Crestone throughout the life of the Location.

Invasive and Noxious Weed Management

Weeds will be mitigated on an as-needed basis via mowing operations or herbicide application. As the disturbance area will be returned to cropland, any weed management will be approved by the surface owner.

Site-Specific Interim Reclamation Best Management Practices (BMPs)

The following BMPs will be utilized:

Erosion Control Measure Deployment:

- Drainage swales will be installed along the south and east perimeters of the well and facility pad to divert stormwater runoff from the working surface.
- A detention pond will be constructed along the southeast pad perimeter to collect stormwater runoff.

Soil Management and Placement

- Topsoil horizon depth will be identified based on changes in physical characteristics.
- Topsoil will be separated from the disturbance area to the depth of the topsoil horizon.
- Salvaged topsoil will be stockpiled, seeded with cover crop grasses, and the location marked or documented.
- Topsoil will not be comingled with subsoil materials during recontouring and subsoil preparation operations.

Weed Management

- The Location will be routinely monitored for the establishment of invasive and noxious weeds.
- Mowing or herbicide application will be deployed to control weeds, with prior approval granted by the surface owner.

Pre-Disturbance Landscape Assessment

- A landscape assessment will be conducted prior to ground disturbance to ensure that the recontoured reclamation surface matches pre-disturbance grade and topography.
- Any preexisting drainage features will be reestablished during recontouring.

Grading Operations

- Subsoils will be cross-ripped to a depth of 18 inches to alleviate compaction and promote root growth.
- Subsoils will be packed to ensure proper density for root establishment prior to topsoil application.
- Topsoil will be redistributed throughout the interim reclamation area to the depth of pre-disturbance conditions and final contouring will occur to match pre-disturbance topography.

Revegetation/Seeding

- The seedbed will be disked to ensure that proper grade, soil texture and bulk density is achieved to support the return to crop cultivation by the surface owner.
- Soil amendments will be applied to maximize the capability of the disturbance area to support uniform reestablishment of crops.
- The interim reclamation area will be seeded with Winter wheat when returned to crop cultivation.
- Seeding will be completed by the surface owner or tenant farmer during the fall seeding window.

Fence Installation

- No fencing will be installed at the Location as part of the interim reclamation operations.

This Plan summarizes information relevant to the reclamation project acquired from numerous publicly available databases and records, as well as technical resources analyzed by Confluence Compliance Companies, LLC. For additional information, including supporting technical reports, please contact Adam Roll, Project Scientist, at (970) 589-6111 or adam.roll@confluence-cc.com.