



**CRESTONE PEAK**  
RESOURCES

# **TOPSOIL PROTECTION PLAN**

**Submitted with Form 2A Application for**

**Blue 3-65 33-32-31**

**Plan Date: August 17, 2021**

**Submittal Date: September 15, 2021**

**Crestone Peak Resources' Topsoil Protection Plan is being submitted**

**consistent with the requirements of**

**COGCC Rule 1002.c. as described herein.**

TOPSOIL PROTECTION PLAN	
<b>Operator Location Name</b>	BLUE 3-65 33-32-31 1BH, 2AH, 2BH, 3AH, 3BH, 4AH, & 4BH
<b>Legal Description</b>	NWSW Sec. 34, T3S, R65W, 6TH P.M.
<b>Coordinates (Lat/Long)</b>	39.746214 / -104.657717
<b>County</b>	ADAMS

## Introduction

This Topsoil Protection Plan (Plan) was prepared by Confluence Compliance Companies, LLC (Confluence) to support Crestone Peak Resources Operating, LLC (Crestone) in preparing a Form 2A to permit an oil and gas location on the above referenced project site (Location). The following procedures will be implemented to ensure protection of soils through all phases of oil and gas exploration and production.

## Procedures

Throughout construction, drilling, completions, and interim reclamation/production phases, soils will be removed, handled, stockpiled, and maintained to prevent degradation from contamination, erosion, compaction, and to the extent possible, loss of biological activity. Stormwater control measures and Best Management Practices (BMPs) will be implemented to ensure topsoil protection. Topsoil will be monitored regularly by Crestone personnel and during routine stormwater inspections. During construction, drilling, and completions operations, stormwater inspections will occur on a 14-day frequency and within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion.

## Construction

Topsoil will be salvaged from the construction area to a depth of 6 inches or to the depth of the topsoil horizon, whichever is deeper. Prior to initiation of ground disturbance activities, topsoil depth will be assessed based on changes in physical characteristics such as color, density, organic content, consistency, or texture at three (3) soil pit locations within the disturbance boundaries, identified in the attached Soil Pit Site Diagram. Soil pit locations were chosen to include the two (2) Soil Map Units within the disturbance boundaries, as defined by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey. Associated Soil Map Units include Platner loam and Adena-Colby association. Web Soil Survey Map Unit Descriptions indicate topsoil depths within these Soil Map Units range from 0 to 6 inches.

Based on the size of the proposed disturbance and the indicated depths from the Web Soil Survey for this Location, 7,040 cubic yards (yd<sup>3</sup>) of salvaged topsoil will be stored within the southern disturbance boundary in a stockpile with slopes no greater than 4:1. The stockpile will be vertically tracked by heavy equipment to inhibit wind and water erosion during active construction.

## **Drilling and Well Completions**

Salvaged topsoil will be seeded with Quickguard sterile triticale hybrid grass, or a similar performing product, while stockpiled during drilling and well completions operations. Seeding will occur when earthwork operations are complete. During normal operations and stormwater inspections, the Crestone employees and contractors will monitor the stockpile for erosion and establishment of undesirable and noxious weeds. Weeds will be treated mechanically with a mower whenever plant height exceeds 6 inches or before seed development. Chemical treatment of weeds with broad-leaf herbicides will only occur in spot-specific situations where prostrate weed growth or other site conditions preventing mechanical treatment are encountered. Soil sterilant and non-selective herbicides will not be used.

## **Interim Reclamation and Production**

When the Location enters the production phase of operations, areas no longer in use will be interim reclaimed. Topsoil will be redistributed throughout the interim reclamation area and contoured to match pre-disturbance topography. The redistributed soils will be tilled to adequately prepare the seedbed for seeding operations. A portion of topsoil will be used to construct a containment and visual screening berm along the southern perimeter of the pad. The berm will be maintained for long-term topsoil storage for use in final reclamation. During interim reclamation operations, the berm will be seeded with native perennial grasses and temporarily stabilized with crimped straw mulch.

Topsoil will continue to be monitored during 30-day stormwater inspections conducted until the disturbance meets the 70% of reference area cover specified for achieving final stabilization under applicable stormwater CDPHE stormwater permit requirements. Topsoil protection, weed management and erosion control/repair will continue throughout the life of the Location per Colorado Oil and Gas Conservation Commission (COGCC) 1000 Series Rules.

Throughout all phases of development, any identified erosion will be repaired as soon as practicable, which is typically within 72 hours. Additional stormwater control measures will be deployed as needed. All deployed temporary stormwater control measures will be maintained and will remain in place until the disturbance achieves final stabilization as defined in the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division COR400000 permit.

This Plan summarizes Crestone's standard operating procedures for topsoil protection as well as information relevant to topsoil protection acquired from publicly available databases and records 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](mailto:adam.roll@confluence-cc.com).

## **Attachment:**

1. Soil Pit Site Diagram

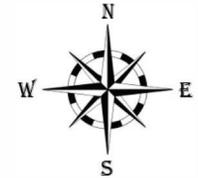
**Soil Pit  
Site Diagram**

**Crestone Peak Resources**

BLUE 3-65 33-32-31 1BH, 2AH, 2BH,  
3AH, 3BH, 4AH, & 4BH

Adams County

NWSW Sec. 34 T3S-R65W



**Legend**

-  Location Disturbance Boundary
-  Soil Map Unit Boundary
-  Soil Pit Location

Spatial data is for presentation purposes only. Discrepancies may exist between disturbance boundaries presented herein and engineered drawings associated with the Location. Soil pit locations may be adjusted during field operations due to on-site conditions.

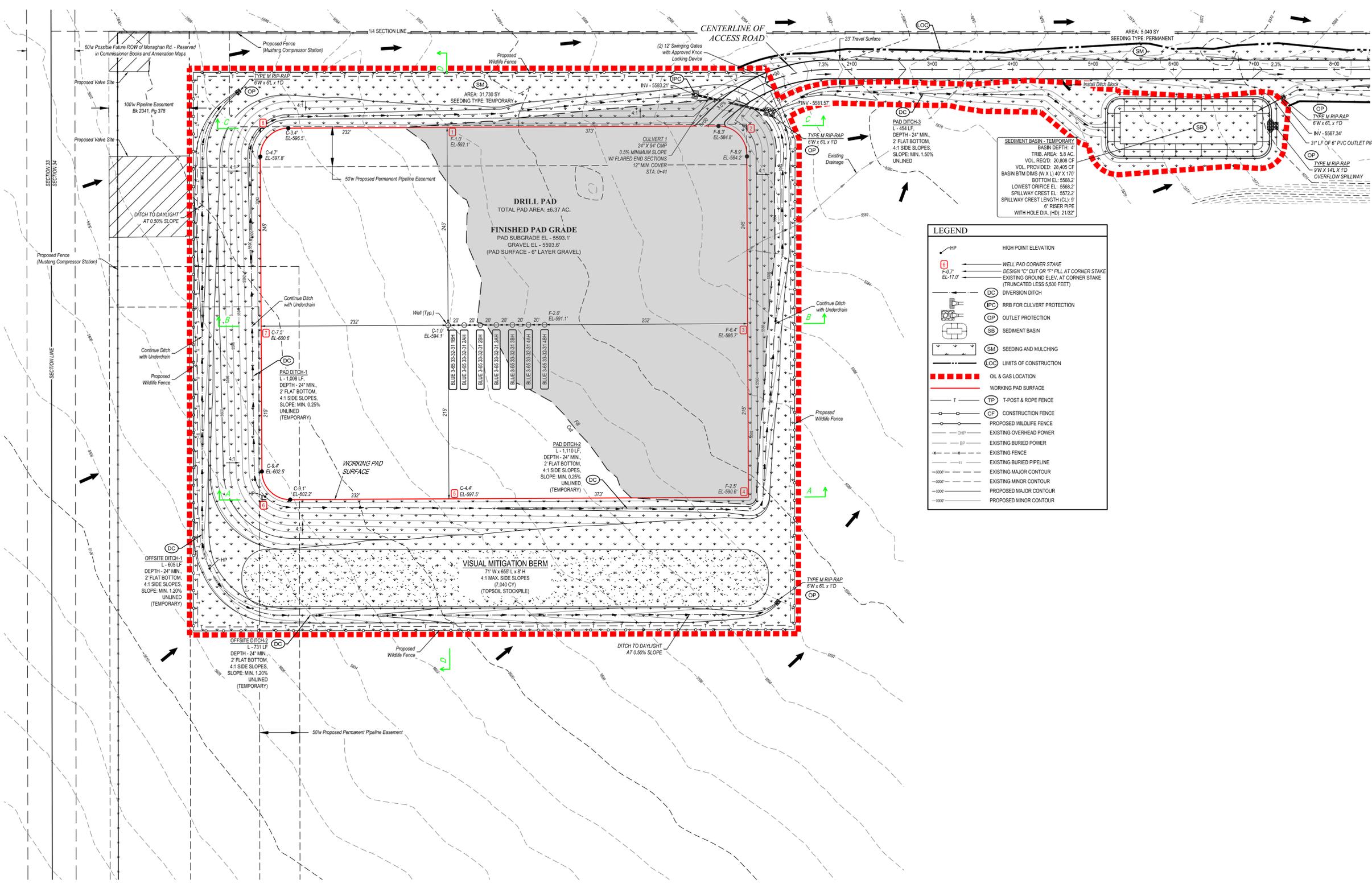
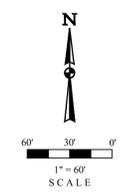
Map created by Adam Roll on 08/16/2021

Platner loam

Adena-Colby association

Adena loam

1000 ft



**SEDIMENT BASIN - TEMPORARY**  
 BASIN DEPTH: 4'  
 TRIG. AREA: 5.8 AC.  
 VOL. REQ'D: 20,808 CF  
 VOL. PROVIDED: 28,405 CF  
 BASIN BTM DIMS (W X L): 40' X 170'  
 BOTTOM EL.: 5568.2'  
 LOWEST ORIFICE EL.: 5568.2'  
 SPILLWAY CREST EL.: 5572.2'  
 SPILLWAY CREST LENGTH (CL): 9'  
 6" RISER PIPE  
 WITH HOLE DIA. (HD): 21/32"

**LEGEND**

HP	HIGH POINT ELEVATION
WELL PAD CORNER STAKE	DESIGN 12" CUT OR 12" FILL AT CORNER STAKE
F-0.7' EL.-17.0'	EXISTING GROUND ELEV. AT CORNER STAKE (TRUNCATED LESS 5.500 FEET)
DC	DIVERSION DITCH
IPC	RRB FOR CULVERT PROTECTION
OP	OUTLET PROTECTION
SB	SEDIMENT BASIN
SM	SEEDING AND MULCHING
LOC	LIMITS OF CONSTRUCTION
(Red dashed line)	OIL & GAS LOCATION
(Red solid line)	WORKING PAD SURFACE
T	T-POST & ROPE FENCE
CF	CONSTRUCTION FENCE
(Dashed line)	PROPOSED WILDLIFE FENCE
CHP	EXISTING OVERHEAD POWER
BSP	EXISTING BURIED POWER
(Dashed line)	EXISTING FENCE
(Dashed line)	EXISTING BURIED PIPELINE
(Dashed line)	EXISTING MAJOR CONTOUR
(Dashed line)	EXISTING MINOR CONTOUR
(Dashed line)	PROPOSED MAJOR CONTOUR
(Dashed line)	PROPOSED MINOR CONTOUR

**NOTES:**  
 • Rounded corners shown at 35' radius.  
 • Contours shown at 2' intervals.  
 • Cut/Fill slopes 4:1 (Typ.)  
 • Overall working pad surface = 605' x 460'

REV: 2 08-13-21 C.C. (UPDATE OIL & GAS LOCATION)

WORKING PAD SURFACE DISTURBANCE = 6.371 ACRES  
 DISTURBANCE DURING CONSTRUCTION = 12.979 ACRES

NOTE: Earthwork calculations require a fill @ some location stakes for balance. All fill is to be compacted to a minimum of 95% of the maximum dry density obtained by AASHTO method 198.

**UETS, LLC**  
 Corporate Office • 85 South 200 East  
 Vernal, UT 84078 • (435) 789-1017

**CRESTONE PEAK**  
**RESOURCES OPERATING LLC**  
 BLUE 3-65 33-32-31 1BH, 2AH, 2BH, 3AH, 3BH, 4AH, & 4BH  
 NW 1/4 SW 1/4, SECTION 34, T3S, R65W, 6th P.M.  
 ADAMS COUNTY, COLORADO

SURVEYED BY: MATT MILLER, O.R. 10-27-20 SCALE: 1" = 60'  
 DRAWN BY: CIVIL 11-24-20

**CONSTRUCTION LAYOUT - PLAN VIEW**