

State University Soil Lab - Soil Analysis Report

Professional Soil Water Characteristics Analysis

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Company: State University Soil Lab

Report Date: 5/31/2025

Analysis Type: ENTERPRISE Plan - Custom Report

Executive Summary

Soil Classification: sandy clay loam

Water Holding Capacity: 9.1% Plant Available Water

Drainage Characteristics: 28.3 mm/hr saturated conductivity

Overall Assessment: Moderate soil water characteristics suitable for most crops.

Detailed Soil Composition

Sand Content

58.7%

Clay Content

22.1%

Silt Content

Organic Matter

19.2%

2.1%

Hydrological Properties

Field Capacity (θ_{FC})

18.9%

Permanent Wilting Point
(θ_{PWP})

9.8%

Plant Available Water (PAW)

9.1%

Saturation Point (θ_S)

46.4%

Physical and Chemical Properties

USDA Texture Classification

sandy clay loam

Saturated Hydraulic
Conductivity

28.3 mm/hr

Bulk Density Factor

1.42 g/cm³

Gravel Content

0%

Management Recommendations

- Implement water conservation practices
- Consider drought-tolerant crop varieties

Generated by State University Soil Lab using FlahaSoil Enterprise Analysis System

Based on Saxton & Rawls (2006) Soil Water Characteristics methodology

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