FLAHA PA

FLAHASOIL

SOIL ANALYSIS REPORT

Professional Water Characteristics Analysis

GENERATED FOR:

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REPORT INFORMATION:

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Report ID: FLH-Analysis145-02062025

Plan: PROFESSIONAL

Based on Saxton & Rawls (2006) Methodology
Professional Soil Water Characteristics Analysis

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1. SOIL PROPERTIES

COMPOSITION ANALYSIS

Sand Content 20%	**Clay Content** 55%
Silt Content 25%	**Organic Matter** 4.2%

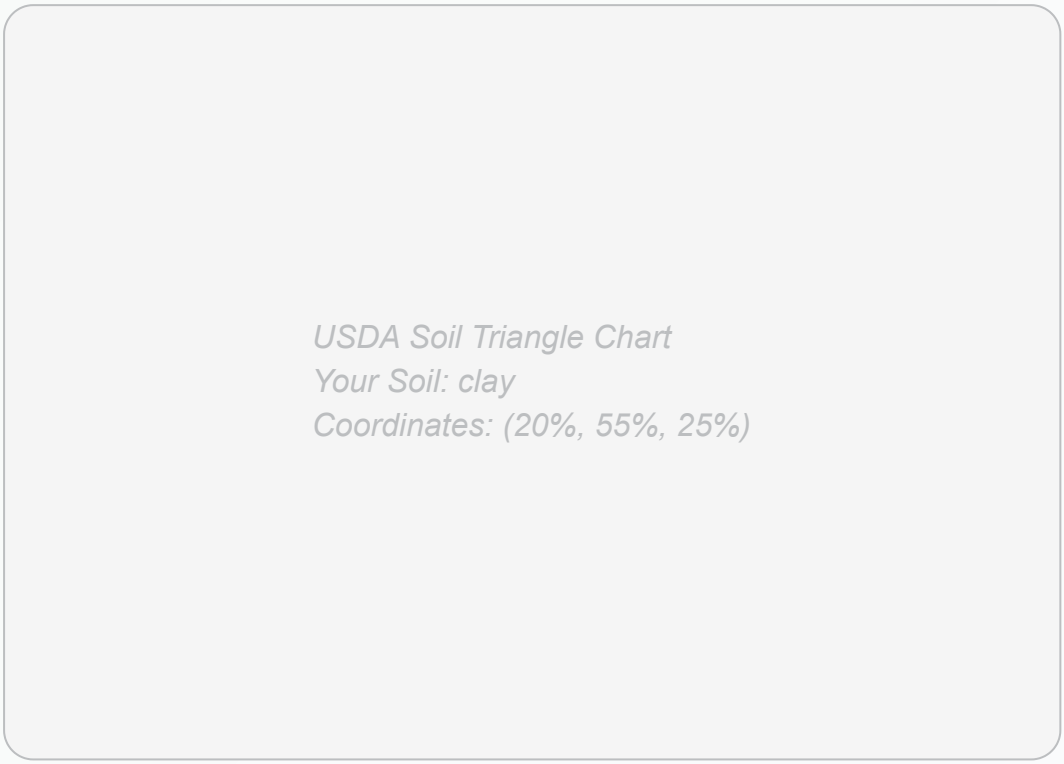
BULK DENSITY ANALYSIS

Bulk Density 1.2 g/cm³	**Porosity** 0.55%
Void Ratio 0.01	**Texture Class** clay

Analysis: Low to moderate bulk density - good soil structure with adequate pore space.

2. SOIL TEXTURE CLASSIFICATION

USDA TRIANGLE CLASSIFICATION



Classification
clay

Confidence Level
High

PARTICLE SIZE DISTRIBUTION

Sand Particles (0.05-2.0 mm)
20%

Silt Particles (0.002-0.05 mm)
25%

Clay Particles (<0.002 mm)
55%

Dominant Particle
Clay

Distribution Analysis: Clay-dominated texture provides excellent nutrient retention and water holding capacity but may have drainage limitations.

3. SOIL ANALYSIS RESULTS

WATER CHARACTERISTICS

Field Capacity
0.42%

Wilting Point
0.25%

Plant Available Water
0.17%

Saturation
0.52%

HYDRAULIC PROPERTIES

Saturated Conductivity
1.2 mm/hr

Infiltration Rate
1.2 mm/hr

Drainage Class
Slow

Permeability
Low

Hydraulic Analysis: Low hydraulic conductivity may cause waterlogging issues and requires drainage management.

QUALITY INDICATORS

Overall Quality Score
80/100

Water Retention
Excellent

Nutrient Holding
Excellent

Agricultural Suitability
Excellent

Quality Assessment: Excellent soil quality with optimal characteristics for diverse agricultural applications. clay texture provides ideal growing conditions.

4. CROP RECOMMENDATIONS

SUITABLE CROPS

Clay-Rich Soils: Excellent for crops requiring good water retention.

Recommended: Rice, Wheat, Soybeans, Alfalfa

Management: Improve drainage, avoid compaction, deep tillage when dry.

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Flaha Landscape

Report generated by FlahaSoil v2.0

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