A. McNitt & SerenSoil Testing

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Sample:

Date Received:	
Testing Dates:	
Report Date:	

Sample Submitted By:

Particle Size Analysis

% Gravel	0.1%
% Sand	97.8%
% Silt	1.6%
% Clay	0.5%

Sand Sieve Size Analysis

	(ASTM F-1632-03)	USGA Specifications	
(No. 10) Gravel (> 2.0 mm)	0.1%	<3%	Maximum 10% combined
(No. 18) Very Coarse Sand (2.0 - 1.0 mm)	3.2%		
(No. 35) Coarse Sand (1.0 - 0.5 mm)	20.1%		Minimum 60% combined
(No. 60) Medium Sand (0.5 - 0.25 mm)	55.4%		
(No. 100) Fine Sand (0.25 - 0.15 mm)	15.7%	<20%	
(No. 270) Very Fine Sand (0.15 - 0.05 mm)	3.4%	<5%	Maximum 10% combined
Silt (0.05 - 0.002 mm)	1.6%	<5%	
Clay (< 0.002 mm)	0.5%	<3%	

Angularity / Sphericity	Acid Reaction	D15	D85	Cu
Sub-Rounded / Medium Sphericity	None	0.20 mm	0.68 mm	2.4
				USGA: 1.8 - 3.5

Physical Properties (ASTM F-1815-11)

Bulk Density (g/cm^3)	Total Porosity	Air-filled Porosity at 30 cm	Capillary Porosity at 30 cm	Hydraulic Conductivity in/hr
1.49	45.4%	22.9%	22.5%	16.8
USGA Specifications:	35 - 55%	15 - 30%	15 - 25%	≥ 6 in/hr

(ASTM F-1647-11, Method A)

Particle Density (g/cm^3)	2.64	Organic Matter % (LOI)	0.75%

Comments

Mix tested as received. USGA sand size specifications are shown for reference. This is a medium to coarse sand that meets USGA sand size specifications. The percolation rate (16.8 in/hr) is within the typical range for sand-based rootzones (12-20 in/hr). Air-filled and capillary porosity values are balanced, indicating a balance of air and water in the rootzone. This mix should function well as a sand-based rootzone assuming proper maintenance.