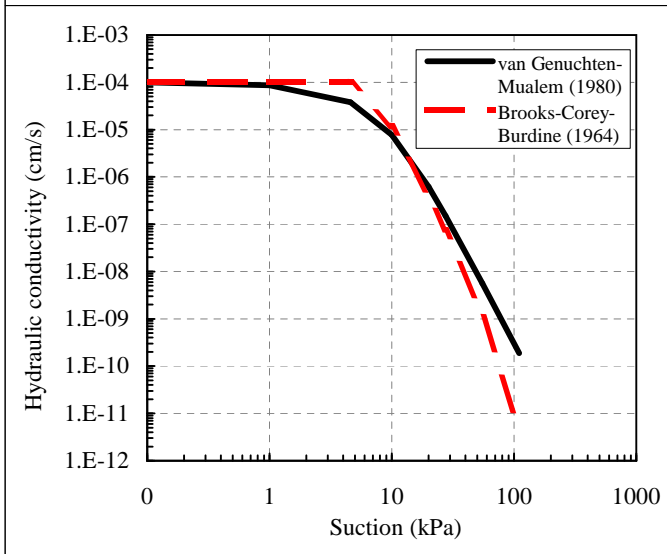
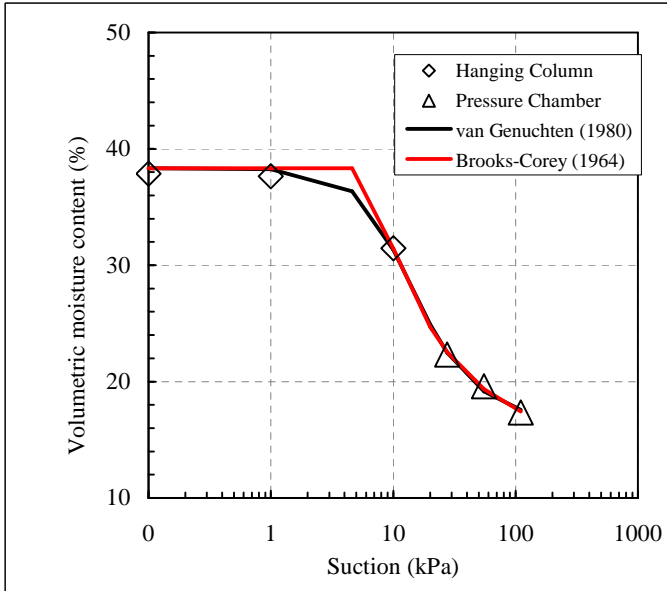




Soil Water Characteristic Curve

Client:
Project:
Sample: Composite

TRI Log#: E2325-09-04
Test Method: ASTM D 6836, Method A & B
Test Date: 04/09/09



TESTING METHOD	Hanging Column	Pressure Chamber
Avg. Sample Height (cm)	2.54	2.54
Avg. Sample Diameter (cm)	6.34	6.34
Wet Weight (g)	145.0	148.2
Initial Water Content (%)	8.74	8.96
Dry Density (g/cm ³)	1.66	1.70
G _s (Mesumed)	2.48	2.48
Void Ratio, e	0.490	0.461
Degree of Saturation, S _{r, initial}	0.44	0.32
Porosity, n	0.329	0.482
Final Water Content (%)	14.88	10.22

		van Genuchten Model (1980) (Fit to SWRC)		Brooks-Corey Model (1964) (Fit to SWRC)		
	Suction, Ψ (kPa)	Volumetric water content, θ (%)	Predicted, θ_{vG} (%)	Predicted, K_{vGM} (cm/s)	Predicted, θ_{BC} (%)	Predicted, K_{BCM} (cm/s)
Hanging Column	0.1	37.88	38.33	9.9E-05	38.33	1.0E-04
	1.0	37.65	38.25	8.7E-05	38.33	1.0E-04
	4.6 ¹	NA	36.35	3.8E-05	38.33	1.0E-04
Pressure Chamber	10.0	31.45	31.31	7.8E-06	31.44	1.2E-05
	20.0	24.78	24.91	6.2E-07	24.69	4.0E-07
	27.6	22.34	22.50	1.5E-07	22.56	7.5E-08
	55.2	19.59	19.16	5.6E-09	19.36	1.3E-09
	110.3	17.34	17.57	1.9E-10	17.44	4.5E-12

Note 1: Ghost point for Brooks-Corey Air Entry Suction

Note 2: The soil was air dried and passed through a No. 8 sieve to eliminate any over sized particles. Soil was remolded a target dry density of 80% Modified Proctor at the optimum moisture content or 104.8 lb/ft³ dry density at a moisture content of 9.0%. Specimen was prepared using Harvard compaction tamper of 0.5-in lifts with kneading compaction.

van Genuchten Model Parameters	
θ_r^2	16.30
α (kPa ⁻¹)	0.10
n	2.18

Brooks-Corey Model Parameters	
θ_r^2	14.56
λ	0.74
Ψ_{ave} (kPa)	6.28

Note 2: θ_r is residual volumetric water content

Cheng-Wei Chen, 05/04/09

Analysis & Quality Review/Date

Tested by: Caleb McCord

The testing herein is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material.

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