



**SOIL MECHANIC LABORATORY**  
**FACULTY OF CIVIL ENGINEERING AND PLANING**  
**INDONESIAN ISLAMIC UNIVERSITY**  
**Jl. Kaliurang KM. 14,4 Telp. (0274) 895042 Yogyakarta 55584.**

**UJI GESEN LANGSUNG UU**

Proyek : Tugas Akhir  
 Lokasi Tanah : Tembilahan, Riau  
 Kode sampel : Tanah Gambut + *Portland Cement* 7% + *Gypsum* 10% (Sampel 2)  
 Dikerjakan : Aldesra Azria Lisananda  
 Tanggal : 23 Mei 2018

Data Sampel	
Diameter (cm)	6
Luas (cm <sup>2</sup> )	28.27433
Tinggi (cm)	2
Volume (cm <sup>3</sup> )	56.54867
Berat cincin (gr)	43.07

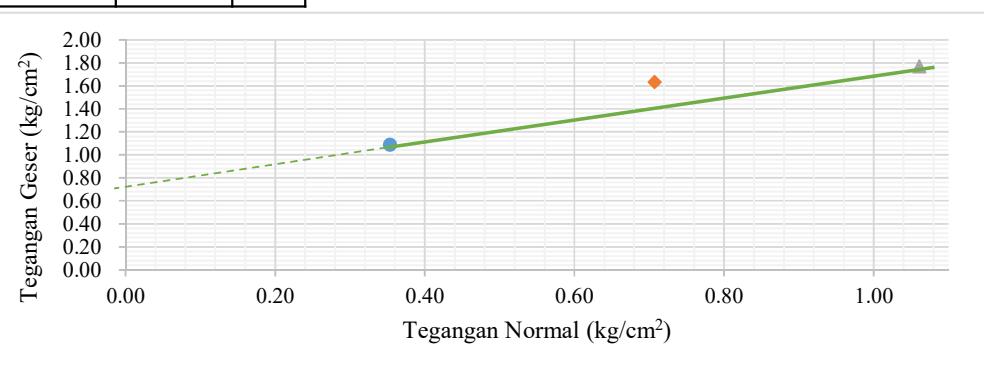
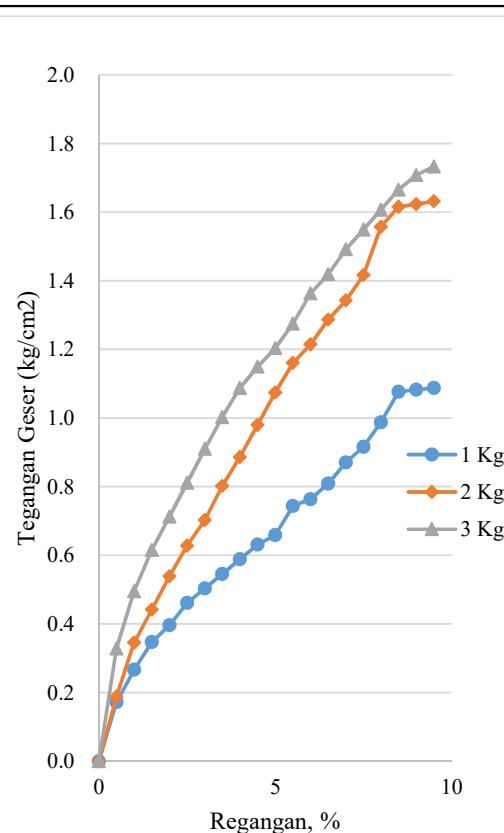
kalibrasi ring = 0.44 kg/div

Kadar air			
Berat Cawan, gr	8.82	8.97	8.88
Berat Cawan + Tanah Basah, gr	19.77	19.1	18.92
Berat Cawan + Tanah Kering, gr	15.3	15.03	14.86
Kadar Air, %	68.981	67.1617	67.893
Kadar Air Rata-rata, %	68.012		

Berat tanah + ring, gr	90.84	90.99	90.11
Berat volume (gr/cm <sup>3</sup> )	0.8449	0.83344	0.84016
Berat volume kering(gr/cm <sup>3</sup> )	0.5	0.49858	0.50041

Tegangan Normal $\sigma_n$ (kg/cm <sup>2</sup> )	0.3537	0.70736	1.06103
Tegangan geser maks $\tau$ (kg/cm <sup>2</sup> )	1.0875	1.63132	1.76829

Sudut geser $\phi$	43.9016	°
Kohesi	0.7472	kg/cm <sup>2</sup>



Mengetahui,  
 Kepala lab. Mekanika Tanah  
 Universitas Islam Indonesia

(Ir. Akhmad Marzuko, M.T.)

Yogyakarta, 13 Agustus 2018  
 Peneliti,

(Aldesra Azria Lisananda)