

LAMPIRAN

Palembang, 22 Maret 2022

Hal : Permohonan Izin Peminjaman Laboratorium Teknik Sipil

Kepada
Yth. Ketua Jurusan Teknik Sipil
Politeknik Negeri Sriwijaya
Di
Palembang

Dengan Hormat,
Sehubungan dengan penelitian yang akan kami lakukan guna menyelesaikan Laporan Akhir, sesuai dengan kurikulum Program Studi D3 Jurusan Teknik Sipil Konsentrasi Bangunan Air Politeknik Negeri Sriwijaya Tahun Akademik 2022, maka dengan ini :

NO.	NAMA	NIM	KELAS
1.	Muhammad Putra Winata	061930100345	6 SB
2.	Nabilah Hakim	061930100387	6 SB

Memohon izin agar dapat memakai fasilitas alat di laboratorium dari tanggal 28 Maret 2022 sampai selesai. (rencana jadwal terlampir)

Demikianlah surat permohonan ini diajukan. Atas perhatian dan izin yang diberikan kami ucapkan terima kasih.

Hormat Kami,
Mahasiswa Yang Mewakili



Muhammad Putra Winata
NIM. 061930100345



POLITEKNIK NEGERI SRIWIJAYA

JURUSAN TEKNIK SIPIL

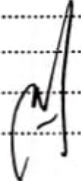
Lembar Disposisi

Dari : Sekretaris Jurusan Teknik Sipil

Kepada : Ketua Program Studi PJJ Kepala Lab. Pengujian Bahan
 Kepala lab. Pengelolaan Material Kepala Lab. Komputer
 Administrasi..... Kepala Perpustakaan Sipil
.....

Isi disposisi : Untuk diolah Untuk diedarkan
 Untuk dipertimbangkan Untuk dimanfaatkan
 Siapkan Konsep Jawaban Untuk diketahui
 Harap Saya di wakili Untuk disimpan
 Harap tanggapan Periksa dan ikuti perkembangan
 Koordinasikan dengan..... *Kasi Lab. Uji Tanah.*

.....
.....
.....
.....
.....
.....

 25/03/2022

Terima kasih

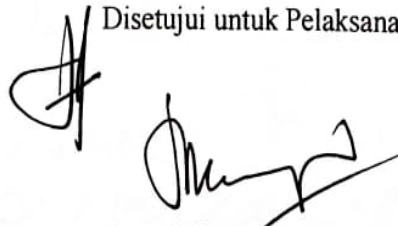
Jadwal Penelitian

Nama : 1. Muhammad Putra Winata
2. Nabilah Hakim

Kelas : 6 SB

No	Kegiatan	Durasi									
		Maret	April				Mei				Juni
		4	1	2	3	4	1	2	3	4	1
I	Persiapan Tanah										
II	Pengujian Index Properties										
	Kadar Air Tanah										
	Berat Jenis Semen										
	Berat Jenis Abu Sekam										
	Berat Jenis Tanah										
	Analisa Saringan										
	Hidrometer										
	Atterberg										
III	Pemeraman benda uji										
IV	Uji Plastisitas Tanah Asli										
V	Uji Plastisitas Tanah + Abu Sekam + Semen										
VI	Uji Pemadatan Tanah Asli										
VII	Uji Pemadatan Tanah + Abu Sekam + Semen										
VIII	Uji Kuat Tekan Bebas Tanah Asli										
IX	Uji Kuat Tekan Bebas Tanah + Abu Sekam + Semen										
X	Uji Kuat Geser Tanah Asli										
XI	Uji Kuat Geser Tanah + Abu Sekam + Semen										
XII	Pengujian CBR										

Disetujui untuk Pelaksanaannya



Drs. Raja Marpaung, S.T., M.T.

NIP. 1957060618831001


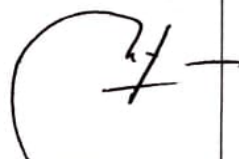


KARTU ASISTENSI BIMBINGAN TUGAS AKHIR

LEMBAR ASISTENSI

Nama Mahasiswa : 1. Muhammad Putra Winata (061930100345)
2. Nabilah Hakim (061930100387)
Kelas : 6 SB
Judul : Pengaruh penambahan Abu sekam dan Semen terhadap stabilisasi tanah berbutir halus
Dosen Pembimbing : 1. Drs. Arfan Hasan, M.T
2. Dr. Indrayani, S.T.,M.T

No	Tanggal	Uraian	Paraf
	25/4-2022	Pengaruh Peramkatan Abu Sekam dan Semen Terhadap Stabilisasi Tanah Berbutir Halus	A.
		Judul OK.	A.
	6/7-2022	- Tentukan judul yg lebih sederhana - substit. variabel. bila yg bisa d. diganti.	A.
	6/7-2022	- Dulu penelitian substit. 1 variabel bebas dupli	A.

No	Tanggal	Uraian	Paraf
	22/7-2022	Pubrasi / Angreuh Analisis dan Publin	
	20/7-2022	<ul style="list-style-type: none"> - Bab publin d. dalam 'legi' - Konsep ke ke publin 1/2 	



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
POLITEKNIK NEGERI SRIWIJAYA
JURUSAN TEKNIK SIPIL
Jln. Srijaya Negara, Palembang 30139



Telp. 0711-353414 Fax. 0711-355918 Email. Info@mail.polsriwijaya.ac.id

KARTU ASISTENSI BIMBINGAN TUGAS AKHIR

LEMBAR ASISTENSI

Nama Mahasiswa : 1. Muhammad Putra Winata (061930100345)
2. Nabilah Hakim (061930100387)
Kelas : 6 SB
Judul : Stabilisasi Semen Untuk Tanah Berbutir Halus Dengan Pengujian
Kuat Tekan Bebas
Dosen Pembimbing : Dr. Indrayani, S.T.,M.T

No	Tanggal	Uraian	Paraf



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
POLITEKNIK NEGERI SRIWIJAYA
Jalan Srijaya Negara, Palembang 30139
Telp. 0711-353414 Fax. 0711-355918
Website : www.polsri.ac.id E-mail : info@polsri.ac.id



LEMBAR REKOMENDASI UJIAN LAPORAN AKHIR (LA)

Pembimbing Laporan Akhir memberikan Rekomendasi kepada :

Nama : Muhammad Putra Winata
NIM : 061930100345
Jurusan / Program Studi : Teknik Sipil / D-III Teknik Sipil Konsentrasi
Bangunan Air
Judul : Stabilisasi Semen Untuk Tanah Berbutir Halus
dengan Pengujian Kuat Tekan Bebas

Mahasiswa tersebut telah memenuhi persyaratan dan dapat mengikuti ujian sidang Laporan Akhir pada Tahun Akademik 2022.

Palembang, Juli 2022

Pembimbing I,

Pembimbing II,

Drs. Arfan Hasan, M.T
NIP. 195908081986031002

Dr. Indrayani, S.T., M.T.
NIP. 197402101997022001

Bunga Cantata

*Abdi yang harus memperbaiki
di laporan.*



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
POLITEKNIK NEGERI SRIWIJAYA
Jalan Srijaya Negara, Palembang 30139
Telp. 0711-353414 Fax. 0711-355918
Website : www.polsri.ac.id E-mail : info@polsri.ac.id



LEMBAR REKOMENDASI UJIAN LAPORAN AKHIR (LA)

Pembimbing Laporan Akhir memberikan Rekomendasi kepada :

Nama : Nabilah Hakim
NIM : 061930100387
Jurusan / Program Studi : Teknik Sipil / D-III Teknik Sipil Konsentrasi
Bangunan Air
Judul : Stabilisasi Semen Untuk Tanah Berbutir Halus
dengan Pengujian Kuat Tekan Bebas

Mahasiswa tersebut telah memenuhi persyaratan dan dapat mengikuti ujian sidang Laporan Akhir pada Tahun Akademik 2022.

Pembimbing I,

Palembang, Juli 2022

Pembimbing II,

Drs. Arfan Hasan, M.T
NIP. 195908081986031002

Dr. Indrayani, S.T., M.T.
NIP. 197402101997022001

Dengan Catatan :
Sebelum ujian yg harus memperbiki
di laporan.
ku

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI
POLITEKNIK NEGERI SRIWIJAYA
JURUSAN TEKNIK SIPIL

LEMBAR PERBAIKAN UJIAN
LAPORAN AKHIR / TUGAS AKHIR

Nama Mahasiswa : M. PUTRA WINATA & NABILAH HAKIM .
N I M : 061930100345 / 061930100387
Judul LA / TA : STABILISASI SEMEN UNTUK TANAH BERBUTIR HALUS BENEAN
Perbaikan : PENEJUTAN KUAT TEKAN BERAS!

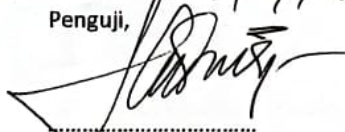
FAK PENBAHASAN
ULTIMAT CAIR -

1. PUNYAN BERBANYAK
PATAKAN - EPIDEM / EFENDIP
DAMBAKIAN . -

r. Di CATATAN LAPORAN .
2 COPY) .

1. TINDAKAN SUDUT PENELITIAN
2. SPESIFIKASI / BAHAN : - UNTUK PROYEK APA
- TANAH ASLI SIP APA
- SYARAT PROTEK BERAPA TPA ??

Palembang, 27 / 07 / 2022 .
Penguji,



NIP 198512072019031007 .

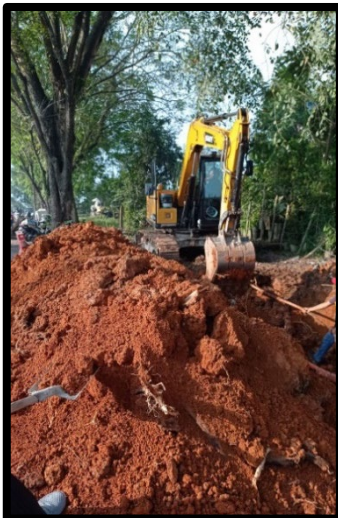
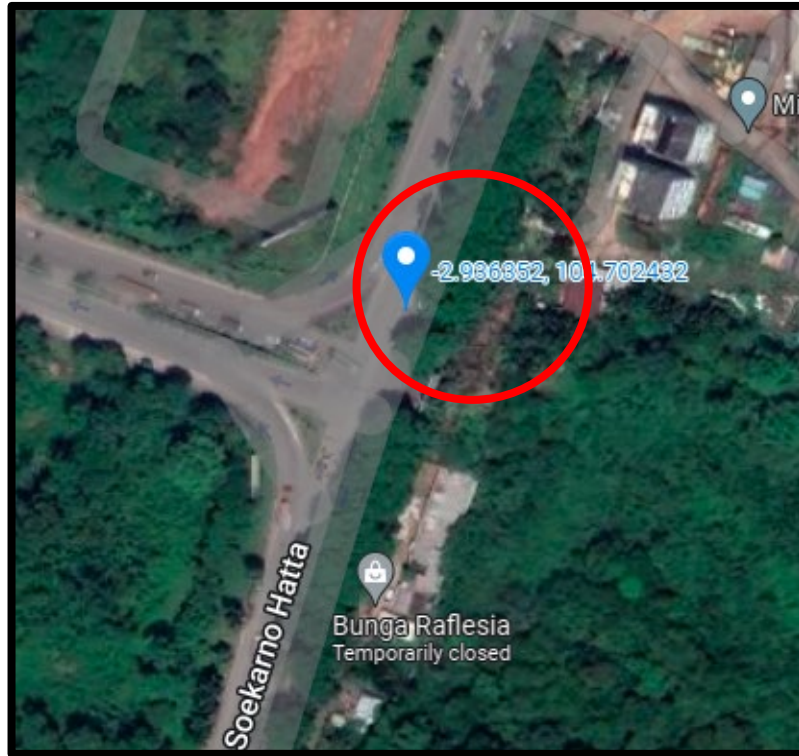


M. PUTRA WINATA



Nabilah Hakim

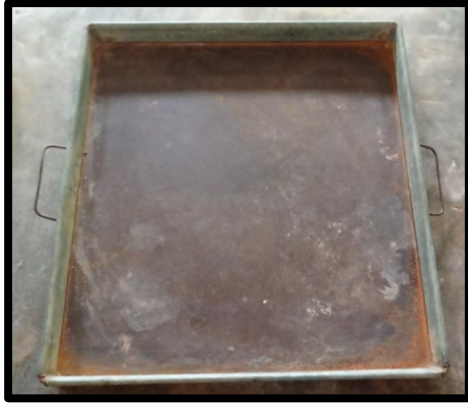
Pengambilan Sampel Tanah



Penjemuran Tanah



Pengujian Kadar Air



Pengujian Berat Jenis



Pengujian Analisis Saringan dan Hidrometer

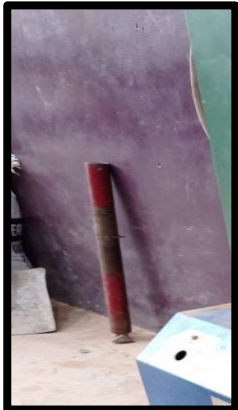




Pengujian Batas-Batas Atterberg



Pengujian Pemadatan Tanah (*Compaction*)





Pengujian Kuat Tekan Bebas (*Unconfined Compression Strength*)





Gs TANAH ASLI	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	36.1	39.55	38.73
B. PIKNO + TANAH KERING (W2)	gr	46.13	49.57	48.74
B. PIKNO + TANAH + AIR (W3)	gr	90.82	94.37	94.26
B. PIKNO + AIR (W4)	gr	85.07	88.73	87.06
BERAT TANAH (Wt)	gr	10.03	10.02	10.01
Wt = W2-W1				
BERAT JENIS (Gs)	gr	2.343458	2.287671	3.562278
Rata-Rata	gr	2.731135586		

Gs TANAH + SEMEN 2.5%	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	40.37	37.04	38.73
B. PIKNO + TANAH + SEMEN (W2)	gr	50.39	47.07	48.73
B. PIKNO + TANAH + SEMEN + AIR (W3)	gr	95.4	93.08	93.39
B. PIKNO + AIR (W4)	gr	88.94	86.78	87.04
BERAT TANAH + SEMEN (Wt)	gr	10.02	10.03	10
Wt = W2-W1				
BERAT JENIS (Gs)	gr	2.814607	2.689008	2.739726
Rata-Rata	gr	2.747780271		

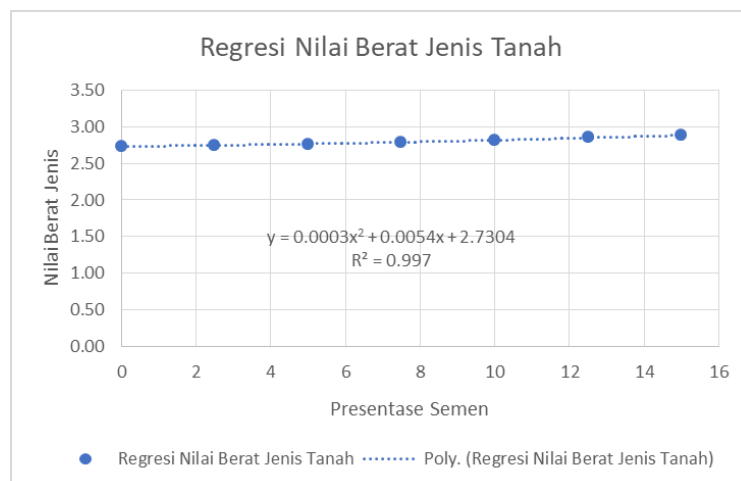
Gs TANAH + SEMEN 5%	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	39.35	39.04	29.94
B. PIKNO + TANAH + SEMEN (W2)	gr	49.37	49.08	39.94
B. PIKNO + TANAH + SEMEN + AIR (W3)	gr	93.6	95.14	86.42
B. PIKNO + AIR (W4)	gr	87.74	88.48	79.87
BERAT TANAH + SEMEN (Wt)	gr	10.02	10.04	10
Wt = W2-W1				
BERAT JENIS (Gs)	gr	2.408654	2.970414	2.898551
Rata-Rata	gr	2.759206257		

Gs TANAH + SEMEN 7.5%	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	41.37	36.52	38.62
B. PIKNO + TANAH + SEMEN (W2)	gr	51.38	46.53	48.62
B. PIKNO + TANAH + SEMEN + AIR (W3)	gr	94.79	91.98	91.51
B. PIKNO + AIR (W4)	gr	88.41	84.72	86.58
BERAT TANAH + SEMEN (Wt)	gr	10.01	10.01	10
Wt = W2-W1				
BERAT JENIS (Gs)	gr	2.757576	3.64	1.972387
Rata-Rata	gr	2.789987448		

Gs TANAH + SEMEN 10%	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	40.26	38.17	38.54
B. PIKNO + TANAH + SEMEN (W2)	gr	50.28	48.17	48.55
B. PIKNO + TANAH + SEMEN + AIR (W3)	gr	94.81	92.76	92.97
B. PIKNO + AIR (W4)	gr	88.36	86.27	86.54
BERAT TANAH + SEMEN (Wt)	gr	10.02	10	10.01
Wt = W2-W1				
BERAT JENIS (Gs)	gr	2.806723	2.849003	2.796089
Rata-Rata	gr	2.817271641		

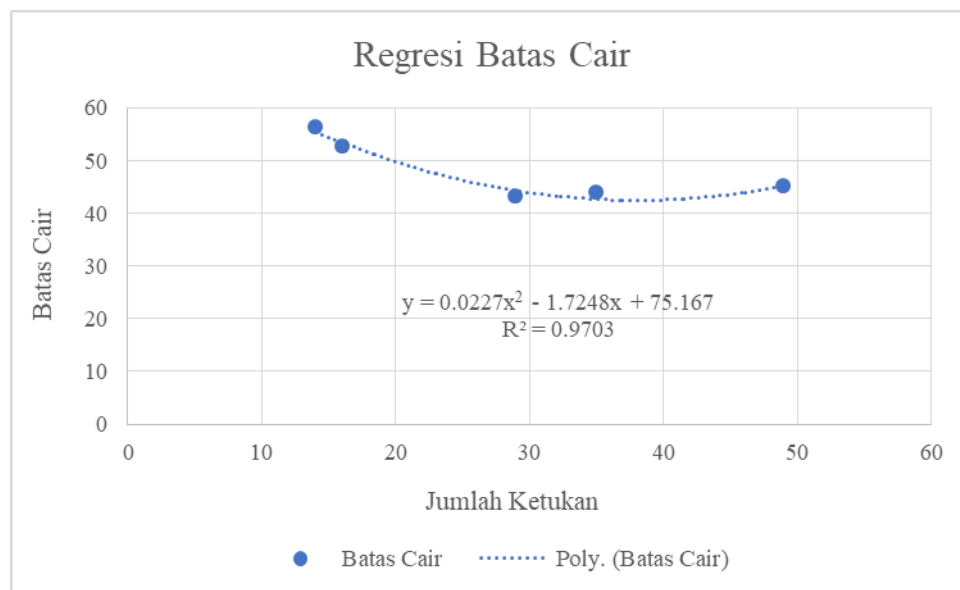
Gs TANAH + SEMEN 12.5%	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	39.35	39.04	29.94
B. PIKNO + TANAH + SEMEN (W2)	gr	49.36	49.05	39.97
B. PIKNO + TANAH + SEMEN + AIR (W3)	gr	94.07	95.19	86.33
B. PIKNO + AIR (W4)	gr	88.15	88.06	80.12
BERAT TANAH + SEMEN (Wt)	gr	10.01	10.01	10.03
Wt = W2-W1				
BERAT JENIS (Gs)	gr	2.447433	3.475694	2.625654
Rata-Rata	gr	2.849593886		

Gs TANAH + SEMEN 15%	No. PIKNO	1	2	3
B. PIKNOMETER (W1)	gr	41.37	36.52	38.62
B. PIKNO + TANAH + SEMEN (W2)	gr	51.4	46.58	48.74
B. PIKNO + TANAH + SEMEN + AIR (W3)	gr	95.67	91.64	92.06
B. PIKNO + AIR (W4)	gr	88.89	84.84	86.04
BERAT TANAH + SEMEN (Wt)	gr	10.03	10.06	10.12
Wt = W2-W1				
BERAT JENIS (Gs)	gr	3.086154	3.08589	2.468293
Rata-Rata	gr	2.880112033		



KETUKAN		14	16	29	35	49	KETUKAN		A	B
B. CAWAN + T. BASAH	gr	46.3	44.56	36.26	36.14	43.93	B. CAWAN + T. BASAH	gr	18.68	19.03
B. CAWAN + T. KERING	gr	34.68	33.8	29.32	29.23	36.05	B. CAWAN + T. KERING	gr	17.44	17.54
BERAT AIR	gr	11.62	10.76	6.94	6.91	7.88	BERAT AIR	gr	1.24	1.49
BERAT CAWAN	gr	14.06	13.33	13.27	13.49	18.54	BERAT CAWAN	gr	13.88	13.08
BERAT TANAH KERING	gr	20.62	20.47	16.05	15.74	17.51	BERAT TANAH KERING	gr	3.56	4.46
KADAR AIR, W	%	56.35306	52.56473	43.23988	43.90089	45.00286	KADAR AIR, W	%	34.83146	33.40807
KADAR AIR RATA-RATA, W	%	54.45889		43.57038		45.00286	KADAR AIR RATA-RATA, W	%	34.11977	
BATAS CAIR (LL)	%	48.2122809					BATAS PLASTIS (PL)	%	34.11976621	

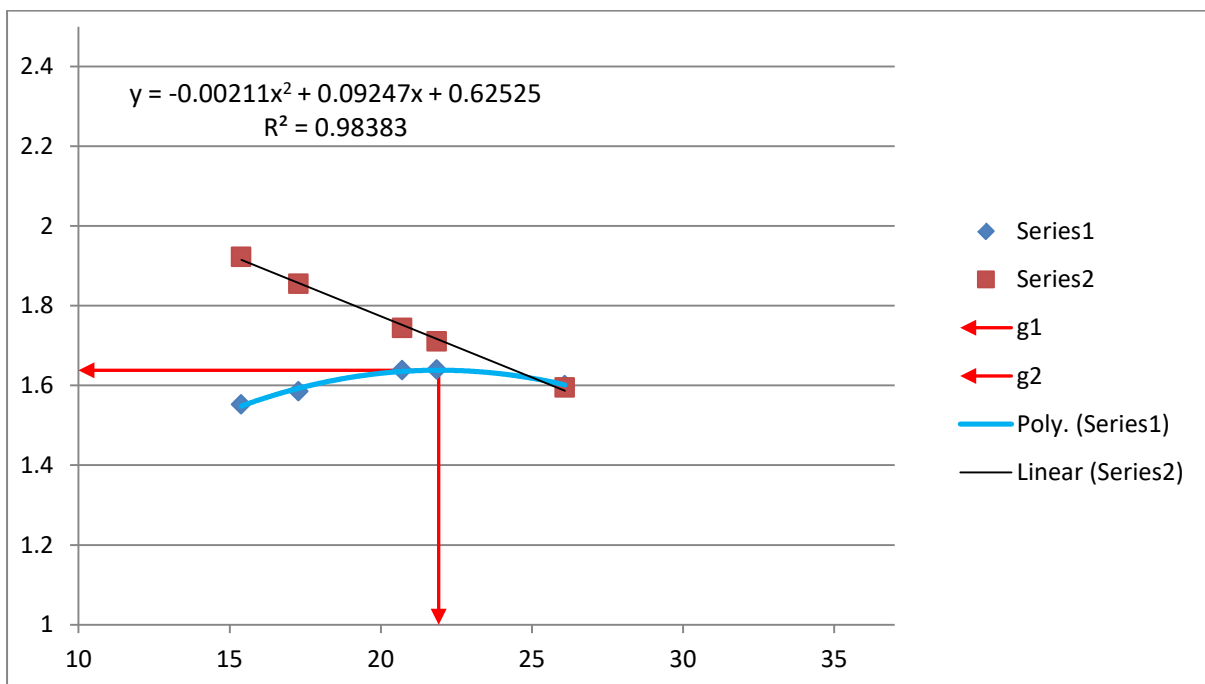
Batas Cair (LL)	48.21228 %
Batas Plastis (PL)	34.11977 %
Indeks Plastisitas (IP)	14.09251 %



PEMADATAN TANAH ASLI

TABEL PENGUJIAN PEMADATAN TANAH											
NO		I	II	III	IV	V					
KADAR AIR ASUMSI	%	10	13	16	19	22					
KADAR AIR, W	%	15.38125	17.27151	20.70141	21.84766	26.08837	VOLU	942.4778			
BERAT TANAH + CETAKAN	gr	3684.8	3748.6	3860	3879.8	3898.4	GS	2.7311			
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5					
BERAT TANAH	gr	1688.3	1752.1	1863.5	1883.3	1901.9					
BERAT ISI BASAH	gr/cm ³	1.791342	1.859036	1.977235	1.998243	2.017979					
BERAT ISI KERING	gr/cm ³	1.552542	1.585241	1.638121	1.639952	1.600448					
BERAT TANAH KERING	gr	1463.236	1494.054	1543.893	1545.619	1508.387					
VOLUME TANAH KERING	cm ³	535.761	547.0451	565.2932	565.9252	552.2928					
VOLUME PORI	cm ³	406.7168	395.4327	377.1845	376.5526	390.185					
ANGKA PORI		0.759138	0.722852	0.667237	0.665375	0.706482					
POROSITAS		0.43154	0.419567	0.400205	0.399535	0.413999					
DERAJAT KEJENUHAN	%	55.33679	65.25655	84.73504	89.67712	100.853					
ZAV	gr/cm ³	1.923223	1.855759	1.744707	1.710499	1.594816					

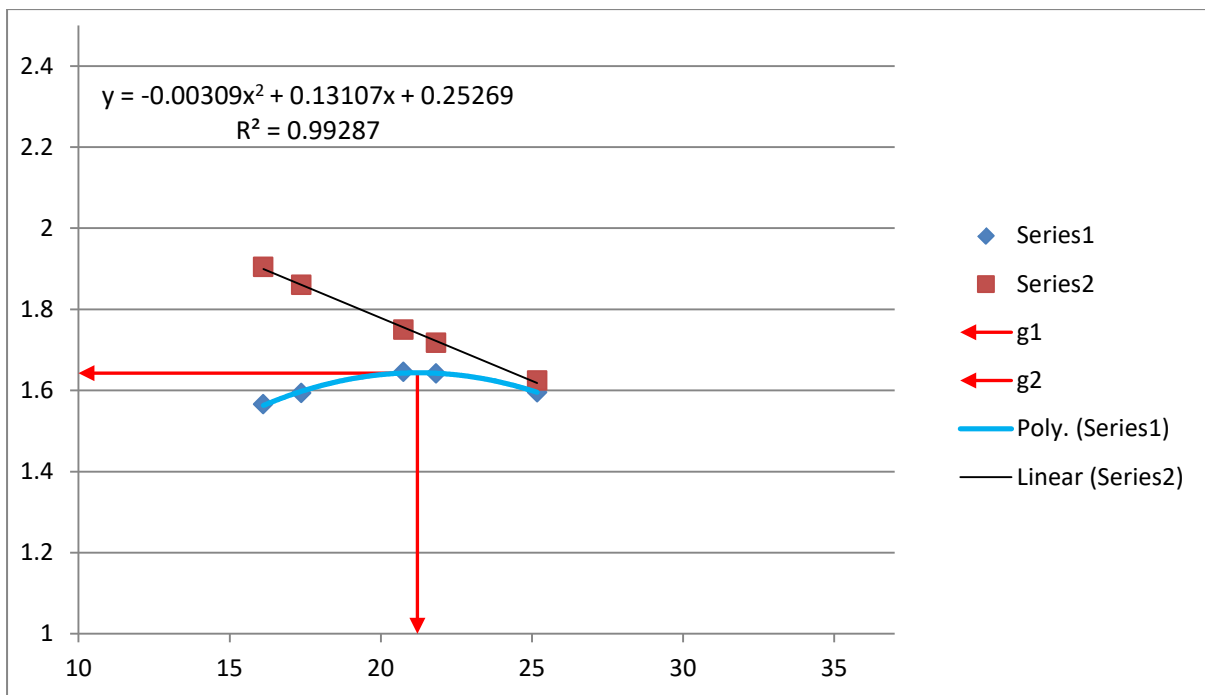
		I		II		III		IV		V	
B. CAWAN + T. BASAH	gr	32.12	30.45	30.97	31.89	29.9	31.79	31.09	31.48	31.65	31.35
B. CAWAN + T. KERING	gr	29.73	28.23	28.42	29.26	27.08	28.79	27.86	28.23	27.58	28.07
BERAT AIR	gr	2.39	2.22	2.55	2.63	2.82	3	3.23	3.25	4.07	3.28
BERAT CAWAN	gr	14.09	13.89	13.58	14.11	13.38	14.38	13.02	13.41	13.86	13.5
BERAT TANAH KERING	gr	15.64	14.34	14.84	15.15	13.7	14.41	14.84	14.82	13.72	14.57
KADAR AIR, W	%	15.28133	15.48117	17.18329	17.35974	20.58394	20.81888	21.7655	21.92982	29.66472	22.512011
KADAR AIR RATA-RATA, W	%	15.38125074		17.27151219		20.70140869		21.84766161		26.08836701	



PEMADATAN TANAH + SEMEN 2.5 %

TABEL PENGUJIAN PEMADATAN TANAH								
NO		I	II	III	IV	V		
KADAR AIR ASUMSI	%	10	13	16	19	22		
KADAR AIR, W	%	16.11102	17.37312	20.75248	21.828	25.17319	VOLU	942.4778
BERAT TANAH + CETAKAN	gr	3709.7	3759.1	3869.1	3881.7	3878.1	GS	2.7478
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5		
BERAT TANAH	gr	1713.2	1762.6	1872.6	1885.2	1881.6		
BERAT ISI BASAH	gr/cm ³	1.817762	1.870177	1.98689	2.000259	1.99644		
BERAT ISI KERING	gr/cm ³	1.565538	1.59336	1.645424	1.641872	1.594942		
BERAT TANAH KERING	gr	1475.484	1501.707	1550.776	1547.428	1503.197		
VOLUME TANAH KERING	cm ³	536.9732	546.5163	564.3739	563.1555	547.0588		
VOLUME PORI	cm ³	405.5046	395.9615	378.1038	379.3223	395.419		
ANGKA PORI		0.755167	0.724519	0.669953	0.673566	0.722809		
POROSITAS		0.430254	0.420128	0.401181	0.402473	0.419553		
DERAJAT KEJENUHAN	%	58.62216	65.88856	85.11535	89.0463	95.69663		
ZAV	gr/cm ³	1.904616	1.859907	1.749919	1.717593	1.624268		

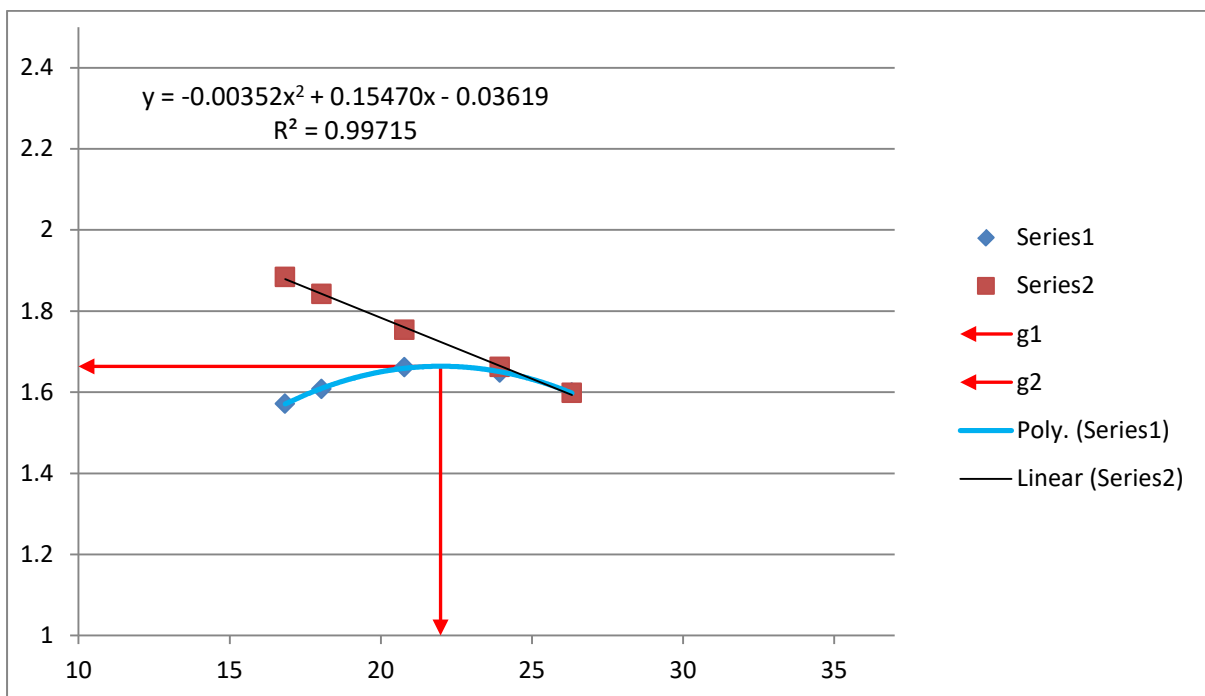
		I		II		III		IV		V	
B. CAWAN + T. BASAH	gr	32.39	31.12	32.27	31.89	29.24	30.28	31.54	31.07	31.55	31.19
B. CAWAN + T. KERING	gr	29.61	28.94	29.55	29.28	26.45	27.41	28.28	27.88	27.87	27.84
BERAT AIR	gr	2.78	2.18	2.72	2.61	2.79	2.87	3.26	3.19	3.68	3.35
BERAT CAWAN	gr	14.33	13.4	14.22	13.93	12.68	13.9	13.96	12.61	13.94	13.84
BERAT TANAH KERING	gr	15.28	15.54	15.33	15.35	13.77	13.51	14.32	15.27	13.93	14
KADAR AIR, W	%	18.19372	14.02831	17.74299	17.00326	20.26144	21.24352	22.76536	20.89064	26.4178	23.92857
KADAR AIR RATA-RATA, W	%	16.11101565		17.37312247		20.75248061		21.82799918		25.17318737	



PEMADATAN TANAH + SEMEN 5 %

TABEL PENGUJIAN PEMADATAN TANAH									
NO		I	II	III	IV	V			
KADAR AIR ASUMSI	%	10	13	16	19	22			
KADAR AIR, W	%	16.83489	18.03678	20.77961	23.93276	26.32161	VOLU	942.4778	
BERAT TANAH + CETAKAN	gr	3726.6	3785.2	3887.8	3921.6	3899.8	GS	2.7592	
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5			
BERAT TANAH	gr	1730.1	1788.7	1891.3	1925.1	1903.3			
BERAT ISI BASAH	gr/cm ³	1.835693	1.89787	2.006732	2.042595	2.019464			
BERAT ISI KERING	gr/cm ³	1.571186	1.607863	1.661482	1.648147	1.598669			
BERAT TANAH KERING	gr	1480.808	1515.375	1565.91	1553.342	1506.71			
VOLUME TANAH KERING	cm ³	536.6789	549.2069	567.5219	562.9671	546.0663			
VOLUME PORI	cm ³	405.7989	393.2709	374.9559	379.5107	396.4114			
ANGKA PORI		0.75613	0.716071	0.66069	0.674126	0.72594			
POROSITAS		0.430566	0.417273	0.397841	0.402673	0.420606			
DERAJAT KEJENUHAN	%	61.43248	69.50041	86.78088	97.95711	100.0451			
ZAV	gr/cm ³	1.884048	1.84233	1.753712	1.661818	1.598365			

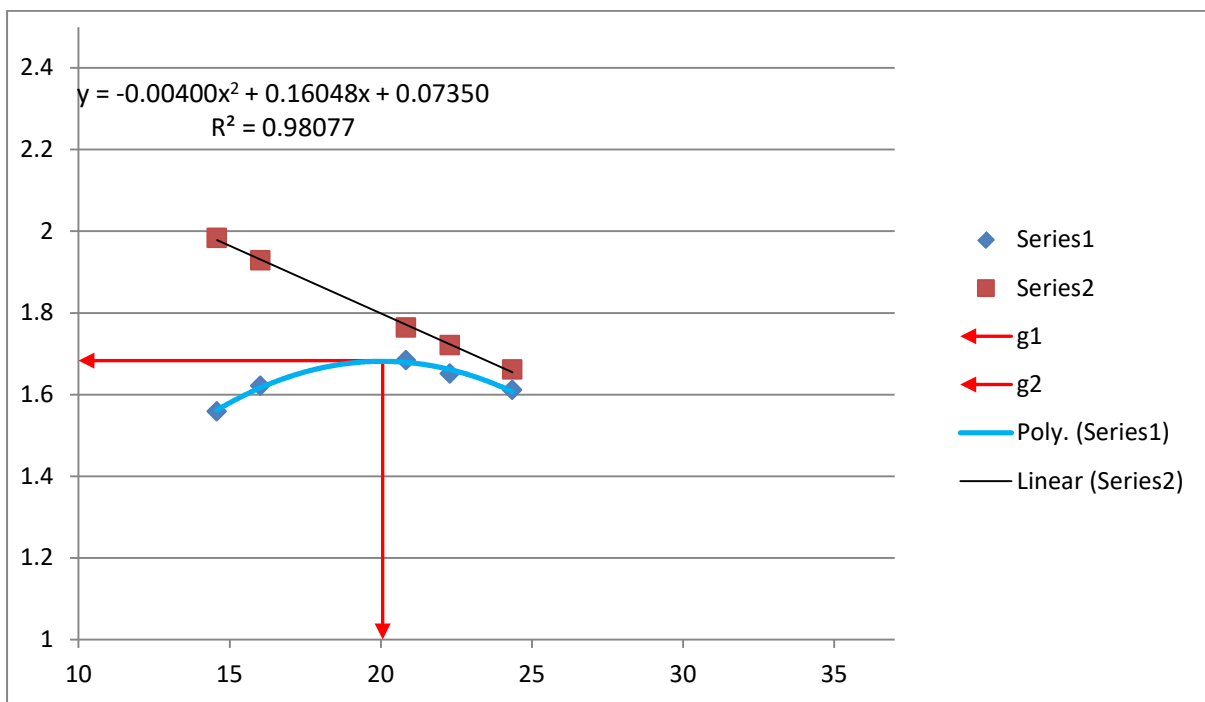
		I		II		III		IV		V	
B. CAWAN + T. BASAH	gr	31.45	31.67	30.96	31.98	31.71	32.03	31.14	31.99	32.17	31.61
B. CAWAN + T. KERING	gr	28.94	29.03	28.13	29.21	28.62	28.88	27.66	28.38	28.51	27.85
BERAT AIR	gr	2.51	2.64	2.83	2.77	3.09	3.15	3.48	3.61	3.66	3.76
BERAT CAWAN	gr	13.51	13.86	12.68	13.61	13.58	13.89	12.74	13.67	14.22	13.94
BERAT TANAH KERING	gr	15.43	15.17	15.45	15.6	15.04	14.99	14.92	14.71	14.29	13.91
KADAR AIR, W	%	16.26701	17.40277	18.31715	17.75641	20.54521	21.01401	23.3244	24.54113	25.61232	27.03091
KADAR AIR RATA-RATA, W	%	16.83489047		18.03678118		20.77961105		23.93276263		26.32161466	



PEMADATAN TANAH + SEMEN 7.5 %

TABEL PENGUJIAN PEMADATAN TANAH									
NO		I	II	III	IV	V			
KADAR AIR ASUMSI	%	10	13	16	19	22			
KADAR AIR, W	%	14.58051	16.01705	20.83777	22.27976	24.34933	VOLU	942.4778	
BERAT TANAH + CETAKAN	gr	3679.9	3768.9	3914.1	3899.7	3884.7	GS	2.7900	
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5			
BERAT TANAH	gr	1683.4	1772.4	1917.6	1903.2	1888.2			
BERAT ISI BASAH	gr/cm ³	1.786143	1.880575	2.034637	2.019358	2.003442			
BERAT ISI KERING	gr/cm ³	1.558854	1.620947	1.683775	1.651425	1.61114			
BERAT TANAH KERING	gr	1469.185	1527.706	1586.921	1556.431	1518.464			
VOLUME TANAH KERING	cm ³	526.5921	547.5675	568.7915	557.8631	544.2548			
VOLUME PORI	cm ³	415.8857	394.9103	373.6863	384.6147	398.223			
ANGKA PORI		0.789768	0.721208	0.656983	0.689443	0.731685			
POROSITAS		0.441268	0.419013	0.396494	0.408089	0.422528			
DERAJAT KEJENUHAN	%	51.50806	61.96181	88.49105	90.16011	92.84645			
ZAV	gr/cm ³	1.983223	1.928287	1.764284	1.720513	1.661356			

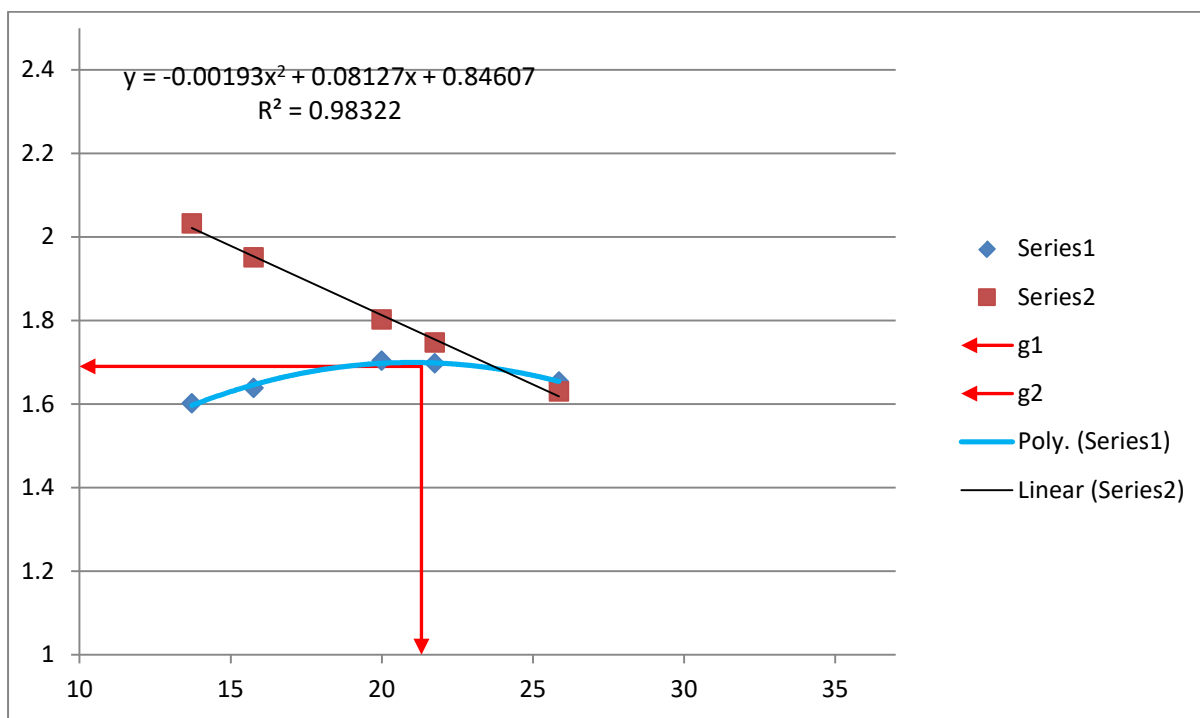
		I		II		III		IV		V	
B. CAWAN + T. BASAH	gr	30.83	31.58	31.48	31.89	35.91	30.15	31.98	31.46	30.88	30.27
B. CAWAN + T. KERING	gr	28.64	29.28	29.04	29.36	32.58	27.45	28.74	28.27	27.55	27.06
BERAT AIR	gr	2.19	2.3	2.44	2.53	3.33	2.7	3.24	3.19	3.33	3.21
BERAT CAWAN	gr	13.15	13.97	13.51	13.86	17.92	13.21	14.22	13.93	13.85	13.9
BERAT TANAH KERING	gr	15.49	15.31	15.53	15.5	14.66	14.24	14.52	14.34	13.7	13.16
KADAR AIR, W	%	14.13815	15.02286	15.71153	16.32258	22.71487	18.96067	22.31405	22.24547	24.30657	24.3921
KADAR AIR RATA-RATA, W	%	14.58050726		16.01705336		20.83777228		22.27975841		24.3493333	



PEMADATAN TANAH + SEMEN 10 %

TABEL PENGUJIAN PEMADATAN TANAH								
NO		I	II	III	IV	V		
KADAR AIR ASUMSI	%	10	13	16	19	22		
KADAR AIR, W	%	13.71357	15.7591	19.99615	21.7538	25.85854	VOLU	942.4778
BERAT TANAH + CETAKAN	gr	3712.7	3783.85	3923	3944.45	3957.9	GS	2.8173
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5		
BERAT TANAH	gr	1716.2	1787.35	1926.5	1947.95	1961.4		
BERAT ISI BASAH	gr/cm ³	1.820945	1.896437	2.04408	2.066839	2.08111		
BERAT ISI KERING	gr/cm ³	1.601343	1.638262	1.703455	1.697556	1.653531		
BERAT TANAH KERING	gr	1509.231	1544.025	1605.468	1599.909	1558.416		
VOLUME TANAH KERING	cm ³	535.7065	548.057	569.8663	567.893	553.1651		
VOLUME PORI	cm ³	406.7713	394.4208	372.6115	374.5848	389.3127		
ANGKA PORI		0.759318	0.719671	0.653858	0.659604	0.703791		
POROSITAS		0.431598	0.418493	0.395353	0.397447	0.413074		
DERAJAT KEJENUHAN	%	50.88101	61.6916	86.15725	92.91383	103.5116		
ZAV	gr/cm ³	2.032153	1.951051	1.802078	1.746751	1.629889		

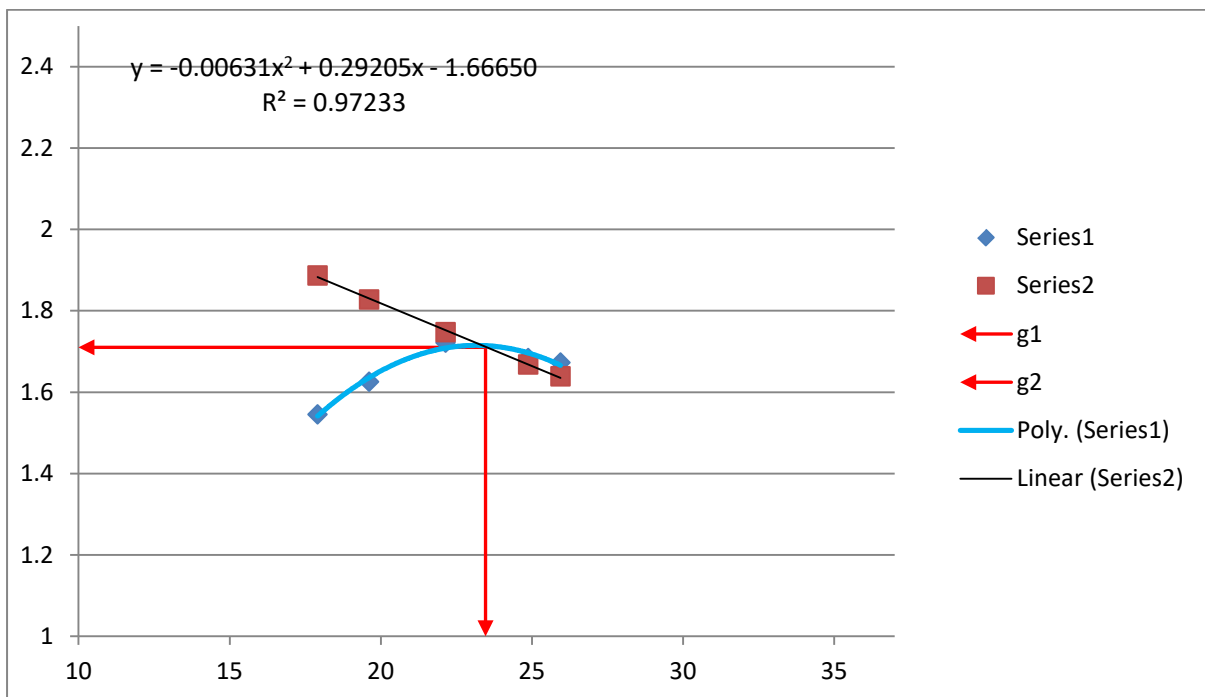
		I		II		III		IV		V	
B. CAWAN + T. BASAH	gr	31.01	31.24	31.09	30.26	30.13	30.1	31.98	31.07	30.46	30.26
B. CAWAN + T. KERING	gr	28.99	29.11	28.52	28.04	27.5	27.34	28.8	27.92	27.06	26.95
BERAT AIR	gr	2.02	2.13	2.57	2.22	2.63	2.76	3.18	3.15	3.4	3.31
BERAT CAWAN	gr	13.4	14.39	13.46	12.68	13.94	13.94	14.33	13.29	14.12	13.94
BERAT TANAH KERING	gr	15.59	14.72	15.06	15.36	13.56	13.4	14.47	14.63	12.94	13.01
KADAR AIR, W	%	12.95702	14.47011	17.06507	14.45313	19.39528	20.59701	21.9765	21.5311	26.27512	25.44197
KADAR AIR RATA-RATA, W	%	13.71356621		15.75909902		19.99614758		21.75380179		25.85854182	



PEMADATAN TANAH + SEMEN 12.5 %

TABEL PENGUJIAN PEMADATAN TANAH									
NO		I	II	III	IV	V			
KADAR AIR ASUMSI	%	10	13	16	19	22			
KADAR AIR, W	%	17.90746	19.6201	22.14314	24.87865	25.94233	VOLU	942.4778	
BERAT TANAH + CETAKAN	gr	3713.5	3829.2	3978.4	3977.8	3982	GS	2.8496	
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5			
BERAT TANAH	gr	1717	1832.7	1981.9	1981.3	1985.5			
BERAT ISI BASAH	gr/cm ³	1.821794	1.944555	2.102861	2.102225	2.106681			
BERAT ISI KERING	gr/cm ³	1.545105	1.625609	1.721637	1.683414	1.672735			
BERAT TANAH KERING	gr	1456.227	1532.1	1622.604	1586.58	1576.515			
VOLUME TANAH KERING	cm ³	511.0296	537.6557	569.416	556.7742	553.2421			
VOLUME PORI	cm ³	431.4482	404.8221	373.0618	385.7036	389.2357			
ANGKA PORI		0.844272	0.752939	0.655166	0.692747	0.703554			
POROSITAS		0.457781	0.42953	0.395831	0.409244	0.412992			
DERAJAT KEJENUHAN	%	60.44136	74.25475	96.30995	102.3376	105.0738			
ZAV	gr/cm ³	1.886786	1.827725	1.747156	1.667462	1.638403			

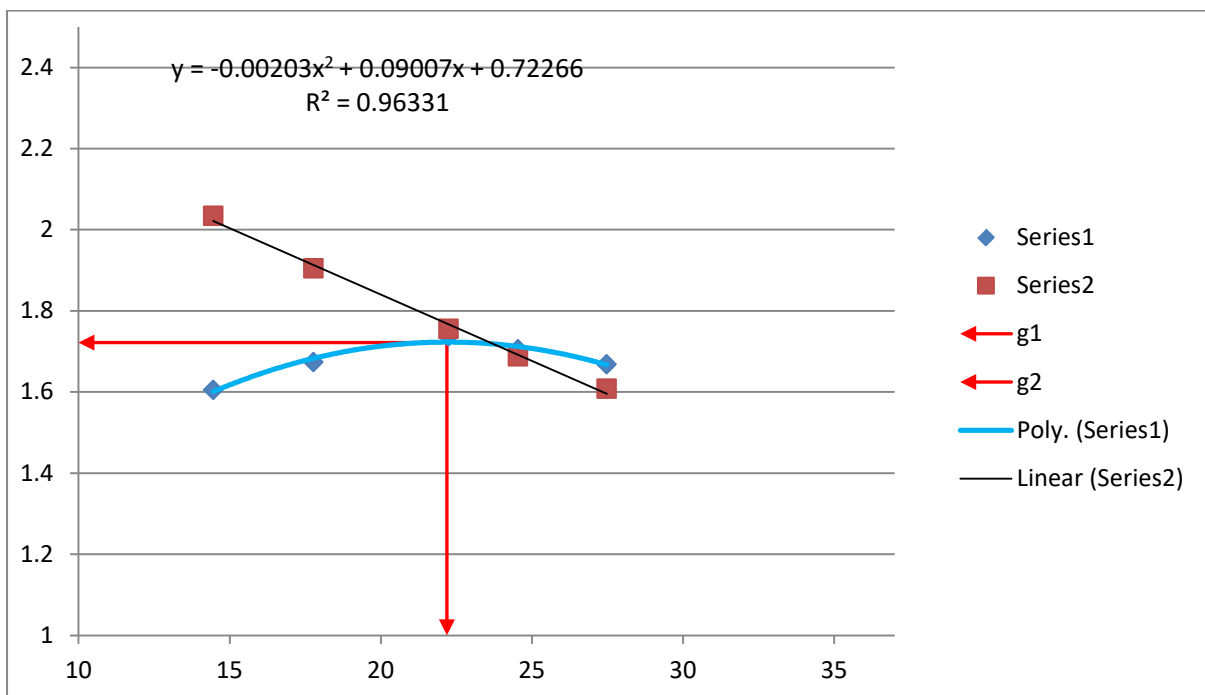
		I	II	III	IV	V						
B. CAWAN + T. BASAH	gr	30.35	31.34	31.84	31.12	31.94	30.76	31.58	32.03	32.42	31.47	
B. CAWAN + T. KERING	gr	27.57	28.74	28.88	28.31	28.69	27.7	28.13	28.27	28.72	27.82	
BERAT AIR	gr	2.78	2.6	2.96	2.81	3.25	3.06	3.45	3.76	3.7	3.65	
BERAT CAWAN	gr	12.63	13.63	14.2	13.58	14.25	13.65	13.38	14.01	14.26	13.94	
BERAT TANAH KERING	gr	14.94	15.11	14.68	14.73	14.44	14.05	14.75	14.26	14.46	13.88	
KADAR AIR, W	%	18.60776	17.20715	20.16349	19.07671	22.50693	21.77936	23.38983	26.36746	25.58783	26.29683	
KADAR AIR RATA-RATA, W	%	17.90745599	19.62010096	22.14314232	24.87864597	25.94232923						



PEMADATAN TANAH + SEMEN 15 %

TABEL PENGUJIAN PEMADATAN TANAH											
NO		I	II	III	IV	V					
KADAR AIR ASUMSI	%	10	13	16	19	22					
KADAR AIR, W	%	14.45458	17.77809	22.24286	24.53578	27.47229	VOLU	942.4778			
BERAT TANAH + CETAKAN	gr	3727.6	3853.8	3997.2	3997.2	3999.8	GS	2.8801			
BERAT CETAKAN	gr	1996.5	1996.5	1996.5	1996.5	1996.5					
BERAT TANAH	gr	1731.1	1857.3	2000.7	2000.7	2003.3					
BERAT ISI BASAH	gr/cm ³	1.836754	1.970657	2.122809	2.122809	2.125567					
BERAT ISI KERING	gr/cm ³	1.604789	1.673195	1.73655	1.704577	1.667474					
BERAT TANAH KERING	gr	1512.478	1576.949	1636.66	1606.526	1571.557					
VOLUME TANAH KERING	cm ³	525.1454	547.5303	568.2626	557.7999	545.6584					
VOLUME PORI	cm ³	417.3324	394.9475	374.2152	384.6779	396.8194					
ANGKA PORI		0.794699	0.721325	0.658525	0.689634	0.727231					
POROSITAS		0.442803	0.419052	0.397055	0.408156	0.421038					
DERAJAT KEJENUHAN	%	52.38566	70.98445	97.28093	102.4685	108.8008					
ZAV	gr/cm ³	2.033535	1.9048	1.755503	1.687574	1.607894					

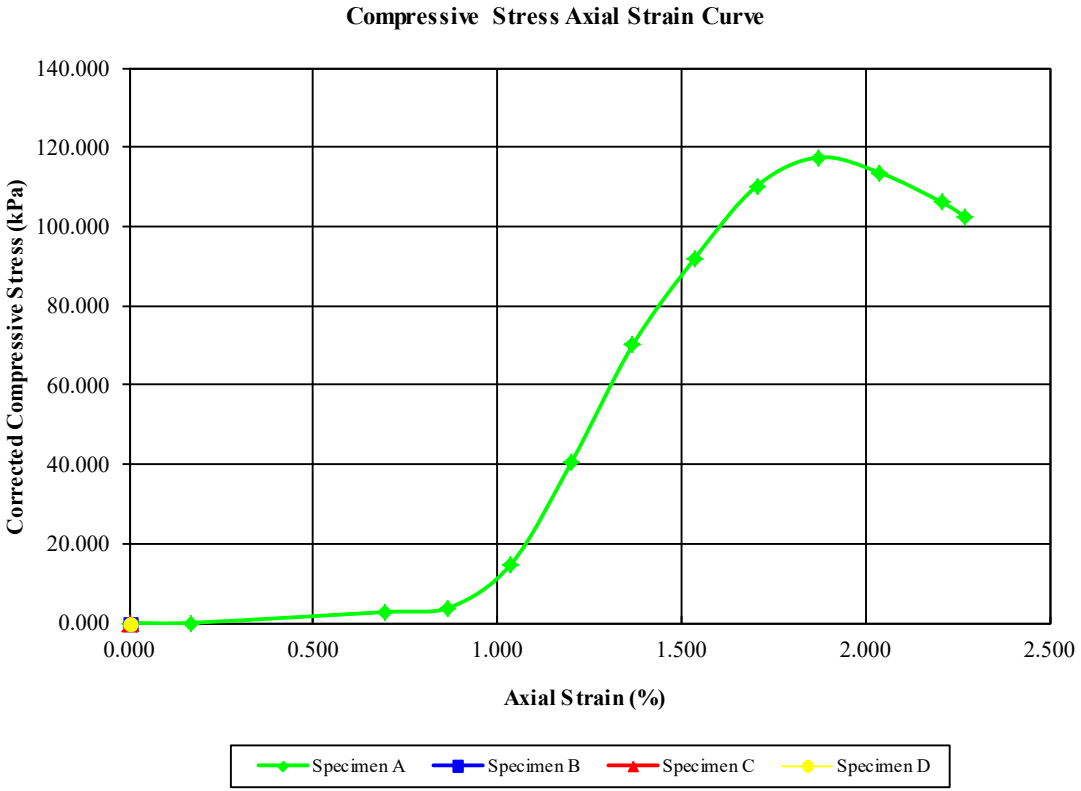
		I		II		III		IV		V	
B. CAWAN + T. BASAH	gr	30.9	31.45	30.51	32.19	31.87	31.17	30.02	31.11	31.38	31.68
B. CAWAN + T. KERING	gr	28.74	29.2	27.96	29.42	28.49	28.18	26.73	27.48	27.58	27.8
BERAT AIR	gr	2.16	2.25	2.55	2.77	3.38	2.99	3.29	3.63	3.8	3.88
BERAT CAWAN	gr	13.47	13.96	13.06	14.4	14.1	13.94	12.67	13.34	13.48	13.94
BERAT TANAH KERING	gr	15.27	15.24	14.9	15.02	14.39	14.24	14.06	14.14	14.1	13.86
KADAR AIR, W	%	14.14538	14.76378	17.11409	18.44208	23.48853	20.99719	23.39972	25.67185	26.95035	27.99423
KADAR AIR RATA-RATA, W	%	14.45458132		17.7780856		22.24286236		24.5357842		27.4722913	



POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date
Checked By



Date
Computed By

Before Test	Specimen			
	A	B	C	D
Water Content (%)	0.00			
Dry Density (g/cm ³)	0.000			
Saturation (%)	0.00			
Void Ratio	0.00			
Diameter (mm)	50.000			
Height (mm)	100.000			
Test Data	A	B	C	D
Unconfined Strength (kPa)	117.401			
Undrained Shear Strength (kgf/cm ²)	0.599			
Undrained Shear Strength (kPa)	58.701			
Rate of Strain (mm/min)	1.000000			
Strain at Failure (%)	1.87			

Date
Tested By

Description		Specimen Description	
Project Num		Specimen A	S1 TANAH ASLI 4H
Project	S1 TANAH ASLI 4H	Specimen B	
Sampling Date		Specimen C	
Sample #		Specimen D	
Client		Test Variables	
		Specific Gravity	2.65
		Liquid Limit:	
		Plastic Limit:	
Remarks			

S1 TANAH ASLI 4H
Specimen A Information
 Unconfined Test

POLSRI

File Location
 S1 TANAH ASLI BENER.HSD

Project Information

Project No.	Molding Date:
Project Name: S1 TANAH ASLI 4H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S1 TANAH ASLI 4H	Sample Depth:
Specimen Remarks:	

Specimen A Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.00	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.00	N/A
Void Ratio	0.00	N/A
Height-to-Diameter Ratio	2.00	N/A

Project S1 TANAH ASLI 4H Specimen A Test Data

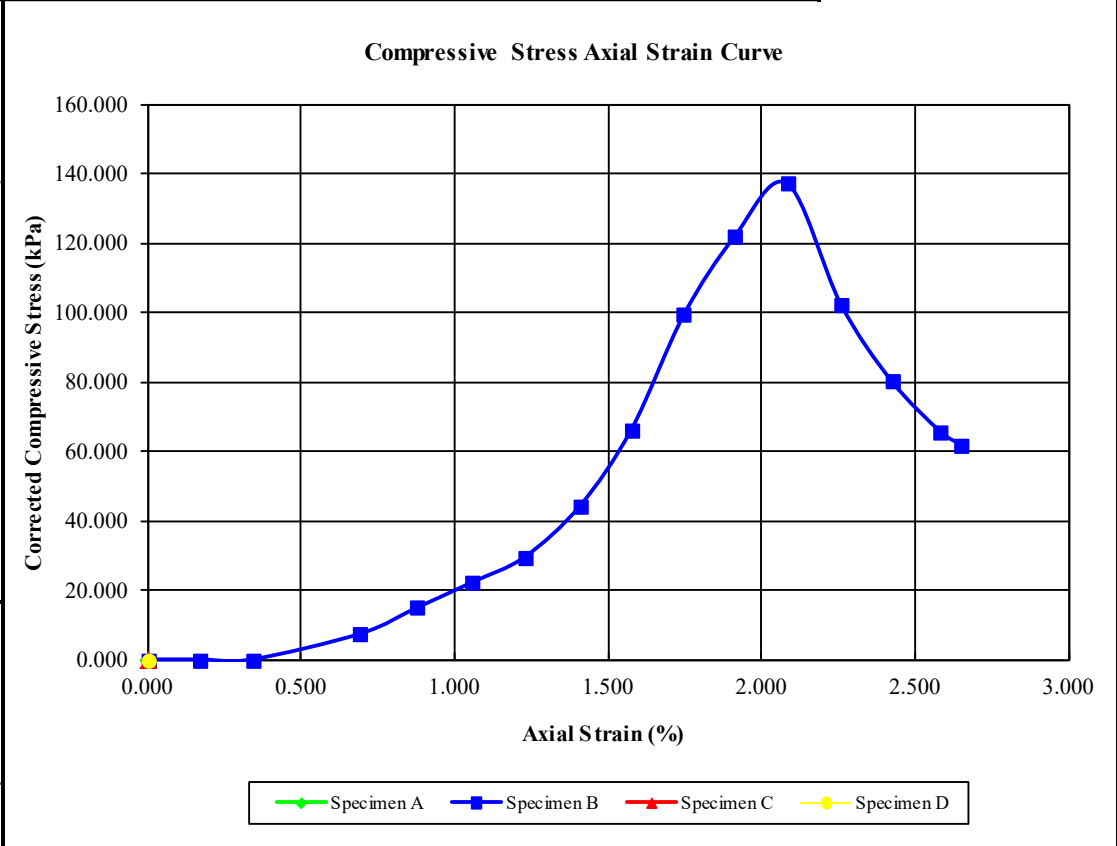
Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 117.401 at reading number: 9

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.343	0.015	0.000	0.000
1	0.513	0.015	0.169	0.000
2	1.036	0.022	0.692	2.706
3	1.210	0.022	0.866	3.713
4	1.381	0.044	1.037	14.800
5	1.546	0.095	1.202	40.632
6	1.711	0.154	1.368	70.065
7	1.881	0.198	1.537	92.033
8	2.049	0.235	1.706	110.250
9	2.216	0.25	1.872	117.401
10	2.383	0.242	2.039	113.539
11	2.552	0.228	2.209	106.030
12	2.616	0.22	2.273	102.307

POLSRI
Unconfined Compression Test Report (ASTMD2166)

Date

Checked By



Date

Computed By

Before Test	Specimen			
	A	B	C	D
Water Content (%)		0.00		
Dry Density (g/cm ³)		0.000		
Saturation (%)		0.00		
Void Ratio		0.00		
Diameter (mm)		50.000		
Height (mm)		100.000		
Test Data	A	B	C	D
Unconfined Strength (kPa)		137.149		
Undrained Shear Strength (kgf/cm ²)		0.699		
Undrained Shear Strength (kPa)		68.575		
Rate of Strain (mm/min)		1.000000		
Strain at Failure (%)		2.08		

Date

Tested By

Description		
Project Information	Specimen Description	
Project Num	Specimen A	
Project	Specimen B S2 TANAH+SEMEN 2.5%	
Sampling Date	Specimen C	
Sample #	Specimen D	
Client	Test Variables	
	Specific Gravity	2.65
	Liquid Limit:	
	Plastic Limit:	
Remarks		

KUAT TEKAN TANAH SEMEN 2.5% 4H

Specimen B Information

Unconfined Test

POLSRI

File Location

S3 TANAH SEMEN 2.5% 4h.HSD

Project Information

Project No.	Molding Date:
Project Name: S2 TANAH+SEMEN 2.5%	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S2 TANAH+SEMEN 2.5%	Sample Depth:
Specimen Remarks:	

Specimen B Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.00	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.00	N/A
Void Ratio	0.00	N/A
Height-to-Diameter Ratio	2.00	N/A

Project KUAT TEKAN TANAH SEMEN 2.5% 4H Specimen B Test Data

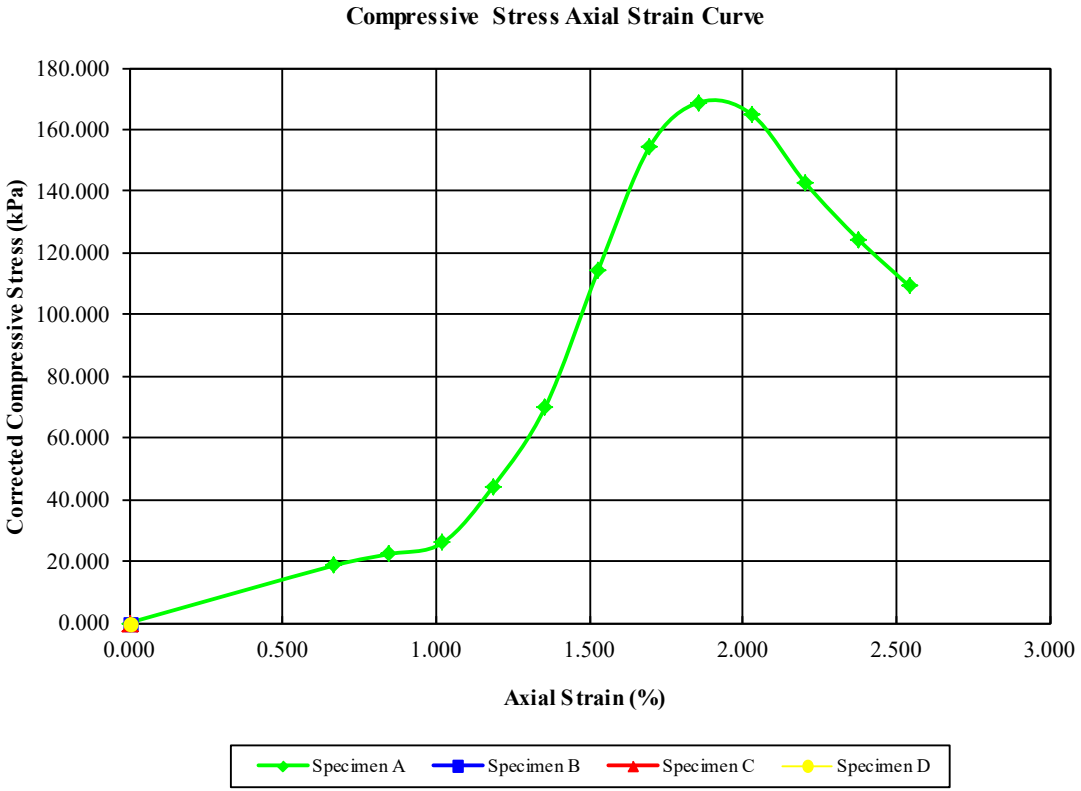
Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 137.149 at reading number: 11

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.630	0.029	0.000	0.000
1	0.802	0.029	0.172	0.000
2	0.971	0.029	0.342	0.000
3	1.324	0.044	0.694	7.426
4	1.506	0.059	0.876	14.824
5	1.688	0.073	1.058	22.196
6	1.860	0.088	1.230	29.543
7	2.039	0.117	1.409	44.233
8	2.207	0.162	1.577	66.237
9	2.377	0.228	1.747	99.184
10	2.542	0.255	1.912	121.687
11	2.713	0.287	2.083	137.149
12	2.889	0.235	2.259	102.321
13	3.054	0.191	2.424	80.260
14	3.214	0.162	2.584	65.559
15	3.280	0.154	2.650	61.875

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date
Checked By



Date
Computed By

Before Test	Specimen			
	A	B	C	D
Water Content (%)	0.00			
Dry Density (g/cm ³)	0.000			
Saturation (%)	0.00			
Void Ratio	0.00			
Diameter (mm)	50.000			
Height (mm)	100.000			
Test Data	A	B	C	D
Unconfined Strength (kPa)	168.788			
Undrained Shear Strength (kgf/cm ²)	0.861			
Undrained Shear Strength (kPa)	84.394			
Rate of Strain (mm/min)	1.000000			
Strain at Failure (%)	1.86			

Date
Tested By

Project Information		Specimen Description	
Project Num		Specimen A	2 KUAT TEKAN TANAH SEMEN 5% 4
Project	AT TEKAN TANAH + SEMEN 5%	Specimen B	
Sampling Date		Specimen C	
Sample #		Specimen D	
Client		Test Variables	
		Specific Gravity	2.65
		Liquid Limit:	
		Plastic Limit:	
Remarks			

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date

Checked By

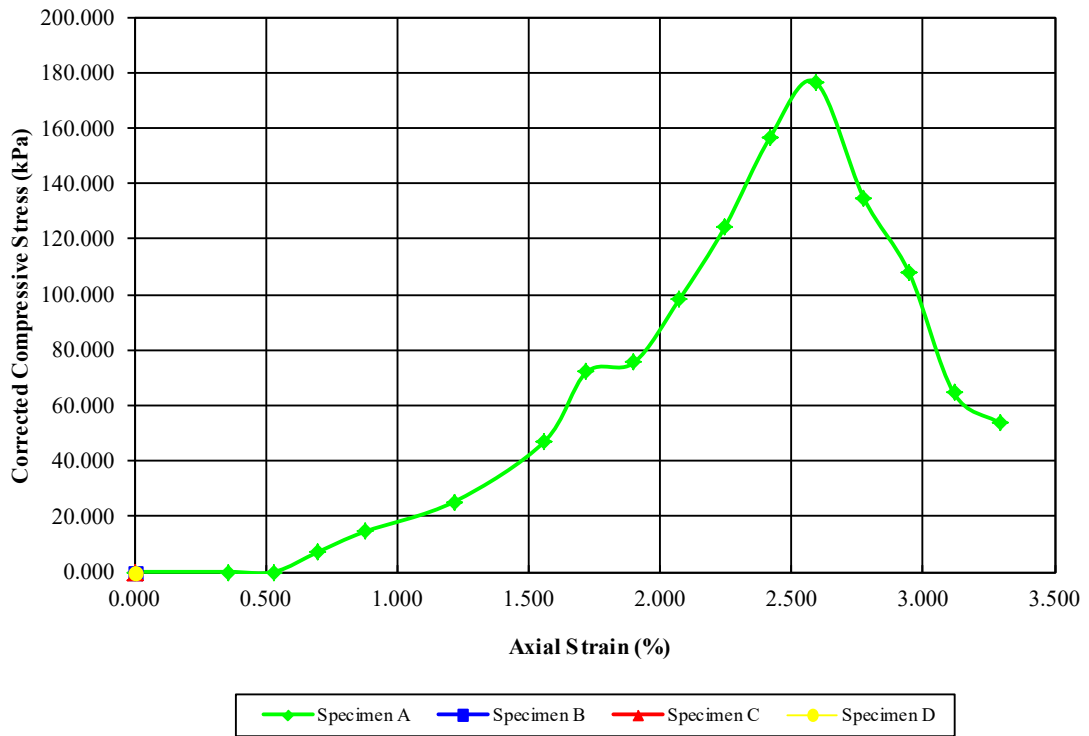
Date

Computed By

Date

Tested By

Compressive Stress Axial Strain Curve



Before Test	Specimen			
	A	B	C	D
Water Content (%)	0.00			
Dry Density (g/cm3)	0.000			
Saturation (%)	0.00			
Void Ratio	0.00			
Diameter (mm)	50.000			
Height (mm)	100.000			
Test Data	A	B	C	D
Unconfined Strength (kPa)	176.577			
Undrained Shear Strength (kgf/cm ²)	0.900			
Undrained Shear Strength (kPa)	88.288			
Rate of Strain (mm/min)	1.000000			
Strain at Failure (%)	2.59			
Description		Specimen Description		
Project Num		Specimen A	KUAT TEKAN TANAH + SEMEN 7.5%	
Project	AT TEKAN TANAH + SEMEN 7.5%	Specimen B		
Sampling Date		Specimen C		
Sample #		Specimen D		
Client		Test Variables		
		Specific Gravity	2.65	
		Liquid Limit:		
		Plastic Limit:		
Remarks				

KUAT TEKAN TANAH + SEMEN 7.5% 4H

Specimen A Information

POLSRI

Unconfined Test

File Location

S1 TANAH SEMEN 7.5% 4h.HSD

Project Information

Project No.	Molding Date:
Project Name: KUAT TEKAN TANAH + SEMEN 7.5% 4H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S1 KUAT TEKAN TANAH + SEMEN 7.5% 4H	Sample Depth:
Specimen Remarks:	

Specimen A Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.00	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.00	N/A
Void Ratio	0.00	N/A
Height-to-Diameter Ratio	2.00	N/A

Project KUAT TEKAN TANAH + SEMEN 7.5% 4H Specimen A Test Data

Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 176.577 at reading number: 12

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.275	0.022	0.000	0.000
1	0.629	0.022	0.354	0.000
2	0.807	0.022	0.532	0.000
3	0.976	0.043	0.701	7.245
4	1.152	0.059	0.877	14.463
5	1.493	0.073	1.218	25.264
6	1.834	0.117	1.559	46.839
7	1.995	0.169	1.720	71.933
8	2.176	0.176	1.901	75.395
9	2.348	0.227	2.073	98.132
10	2.522	0.258	2.247	124.327
11	2.691	0.308	2.416	156.184
12	2.864	0.355	2.589	176.577
13	3.049	0.284	2.774	134.755
14	3.223	0.232	2.948	107.565
15	3.392	0.154	3.117	64.512
16	3.566	0.132	3.291	53.664

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date

Checked By

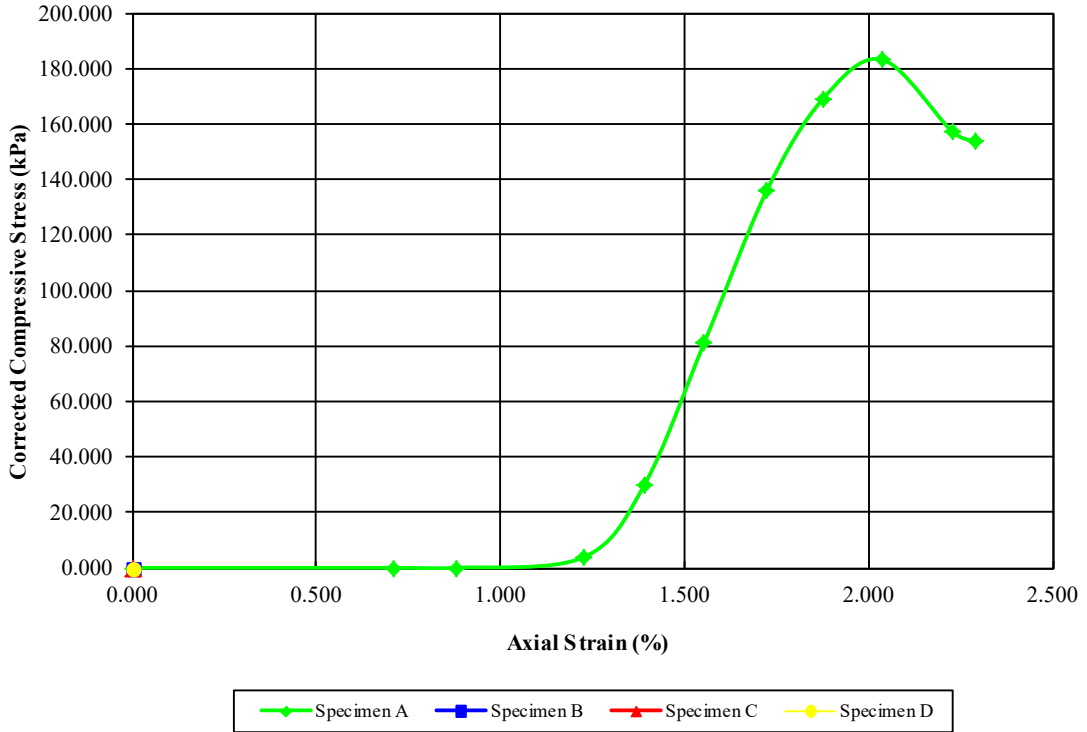
Date

Computed By

Date

Tested By

Compressive Stress Axial Strain Curve



Before Test	Specimen			
	A	B	C	D
Water Content (%)	0.00			
Dry Density (g/cm ³)	0.000			
Saturation (%)	0.00			
Void Ratio	0.00			
Diameter (mm)	50.000			
Height (mm)	100.000			
Test Data	A	B	C	D
Unconfined Strength (kPa)	183.131			
Undrained Shear Strength (kgf/cm ²)	0.934			
Undrained Shear Strength (kPa)	91.566			
Rate of Strain (mm/min)	1.000000			
Strain at Failure (%)	2.04			

Description	
Project Information	Specimen Description
Project Num	Specimen A KUAT TEKAN TANAH + SEMEN 10 %
Project	JAT TEKAN TANAH + SEMEN 10 Specimen B
Sampling Date	Specimen C
Sample #	Specimen D
Client	
Test Variables	
Specific Gravity	2.65
Liquid Limit:	
Plastic Limit:	

Remarks

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date

Checked By

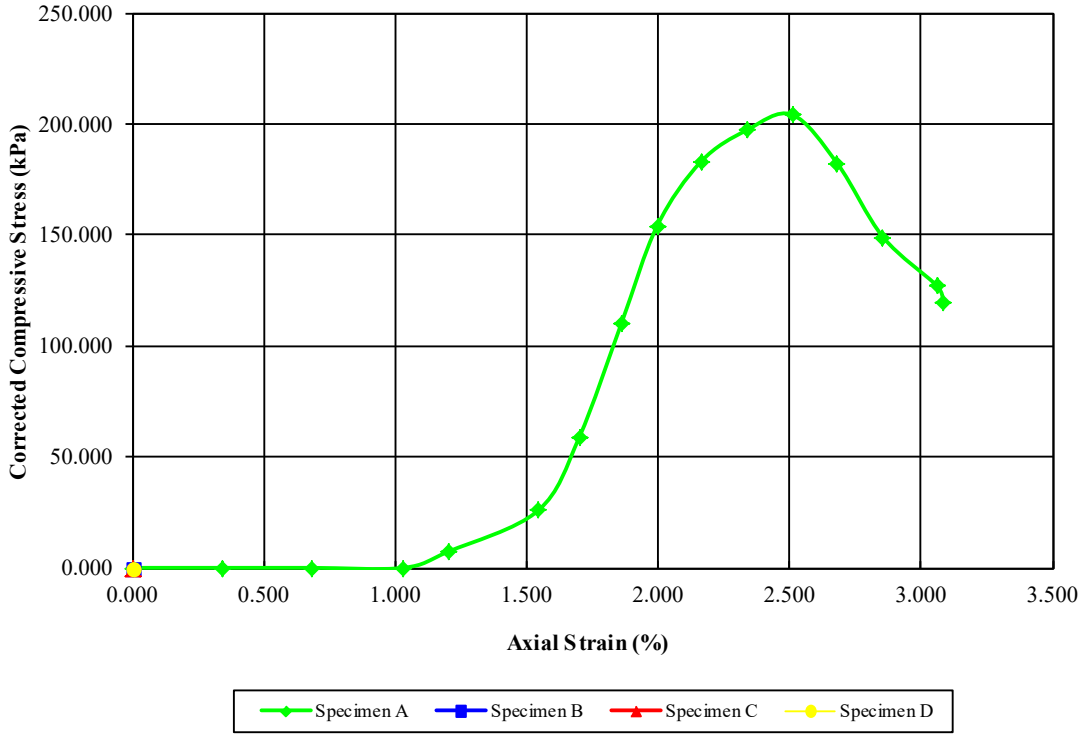
Date

Computed By

Date

Tested By

Compressive Stress Axial Strain Curve



Before Test	Specimen			
	A	B	C	D
Water Content (%)	0.00			
Dry Density (g/cm ³)	0.000			
Saturation (%)	0.00			
Void Ratio	0.00			
Diameter (mm)	50.000			
Height (mm)	100.000			
Test Data	A	B	C	D
Unconfined Strength (kPa)	204.118			
Undrained Shear Strength (kgf/cm ²)	1.041			
Undrained Shear Strength (kPa)	102.059			
Rate of Strain (mm/min)	1.000000			
Strain at Failure (%)	2.51			
Description		Specimen Description		
Project Num		Specimen A	UAT TEKAN TANAH + SEMEN 12.5%	
Project	AT TEKAN TANAH + SEMEN 12.5%	Specimen B		
Sampling Date		Specimen C		
Sample #		Specimen D		
Client		Test Variables		
		Specific Gravity	2.65	
		Liquid Limit:		
		Plastic Limit:		
Remarks				

S2 KUAT TEKAN TANAH + SEMEN 12.5% 4H

Specimen A Information

POLSRI

Unconfined Test

File Location

S2 TANAH SEMEN 12.5% 4H.HSD

Project Information

Project No. Molding Date:
Project Name: S2 KUAT TEKAN TANAH + SEMEN 12.5% 4H Date Tested:
Client: Boring Number:
Sample Location: Sample Number:
Specimen Description: S2 KUAT TEKAN TANAH + SEMEN 12.5% 4H Sample Depth:
Specimen Remarks:

Specimen A Sample Data

Sample Type: Undisturbed
Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.00	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.00	N/A
Void Ratio	0.00	N/A
Height-to-Diameter Ratio	2.00	N/A

Project S2 KUAT TEKAN TANAH + SEMEN 12.5% 4H Specimen A Test Data

Rate of Strain (mm/min): 1.000000
Peak Corrected Compressive Stress (kPa): 204.118 at reading number: 11

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.495	0.015	0.000	0.000
1	0.839	0.015	0.343	0.000
2	1.180	0.015	0.685	0.000
3	1.699	0.015	1.032	0.000
4	1.867	0.029	1.204	7.375
5	2.039	0.066	1.544	25.768
6	2.196	0.132	1.700	58.804
7	2.356	0.235	1.861	110.077
8	2.491	0.323	1.996	153.895
9	2.658	0.382	2.163	182.897
10	2.833	0.411	2.338	197.175
11	3.005	0.426	2.510	204.118
12	3.178	0.382	2.683	181.924
13	3.351	0.316	2.856	148.913
14	3.557	0.272	3.062	126.851
15	3.582	0.257	3.087	119.572

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date

Checked By

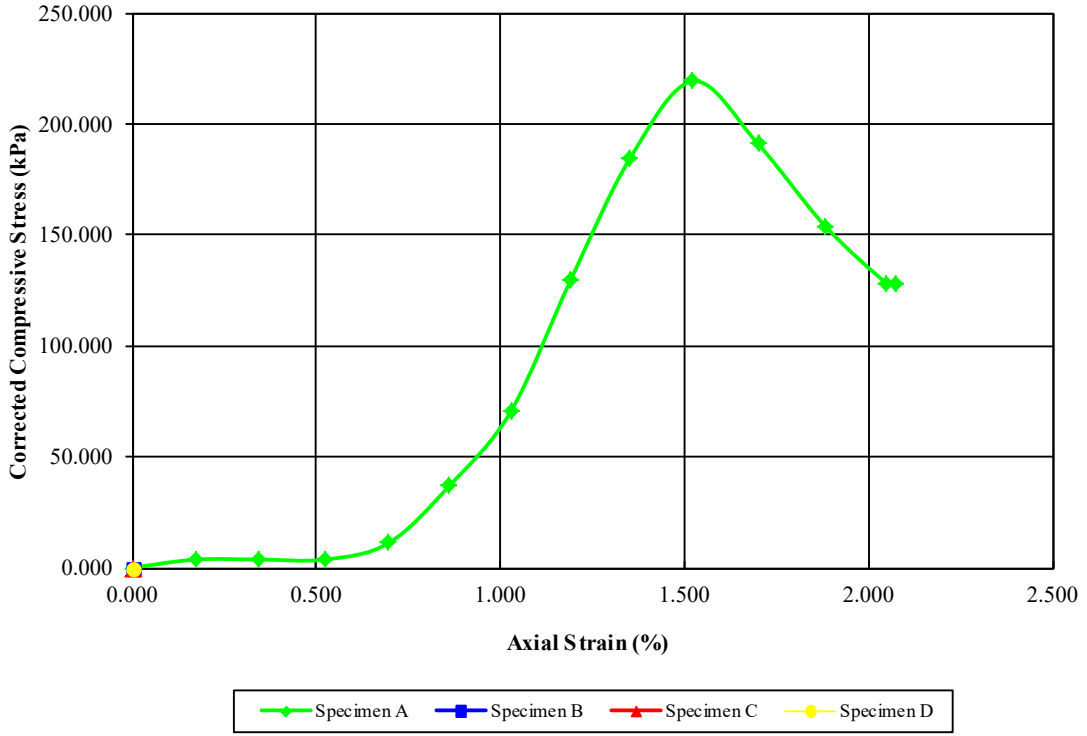
Date

Computed By

Date

Tested By

Compressive Stress Axial Strain Curve



Before Test	Specimen			
	A	B	C	D
Water Content (%)	0.00			
Dry Density (g/cm ³)	0.000			
Saturation (%)	0.00			
Void Ratio	0.00			
Diameter (mm)	50.000			
Height (mm)	100.000			
Test Data	A	B	C	D
Unconfined Strength (kPa)	219.182			
Undrained Shear Strength (kgf/cm ²)	1.118			
Undrained Shear Strength (kPa)	109.591			
Rate of Strain (mm/min)	1.000000			
Strain at Failure (%)	1.52			
Description				
Project Information		Specimen Description		
Project Num		Specimen A	KUAT TEKAN TANAH + SEMEN 15%	
Project	JAT TEKAN TANAH + SEMEN 15	Specimen B		
Sampling Date		Specimen C		
Sample #		Specimen D		
Client		Test Variables		
		Specific Gravity	2.65	
		Liquid Limit:		
		Plastic Limit:		
Remarks				

S1 KUAT TEKAN TANAH + SEMEN 15% 4H

Specimen A Information

POLSRI

Unconfined Test

File Location

S1 TANAHSEMEN 15% 4.HSD

Project Information

Project No. Molding Date:
Project Name: S1 KUAT TEKAN TANAH + SEMEN 15% 4H Date Tested:
Client: Boring Number:
Sample Location: Sample Number:
Specimen Description: S1 KUAT TEKAN TANAH + SEMEN 15% 4H Sample Depth:
Specimen Remarks:

Specimen A Sample Data

Sample Type: Undisturbed
Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.00	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.00	N/A
Void Ratio	0.00	N/A
Height-to-Diameter Ratio	2.00	N/A

Project S1 KUAT TEKAN TANAH + SEMEN 15% 4H Specimen A Test Data

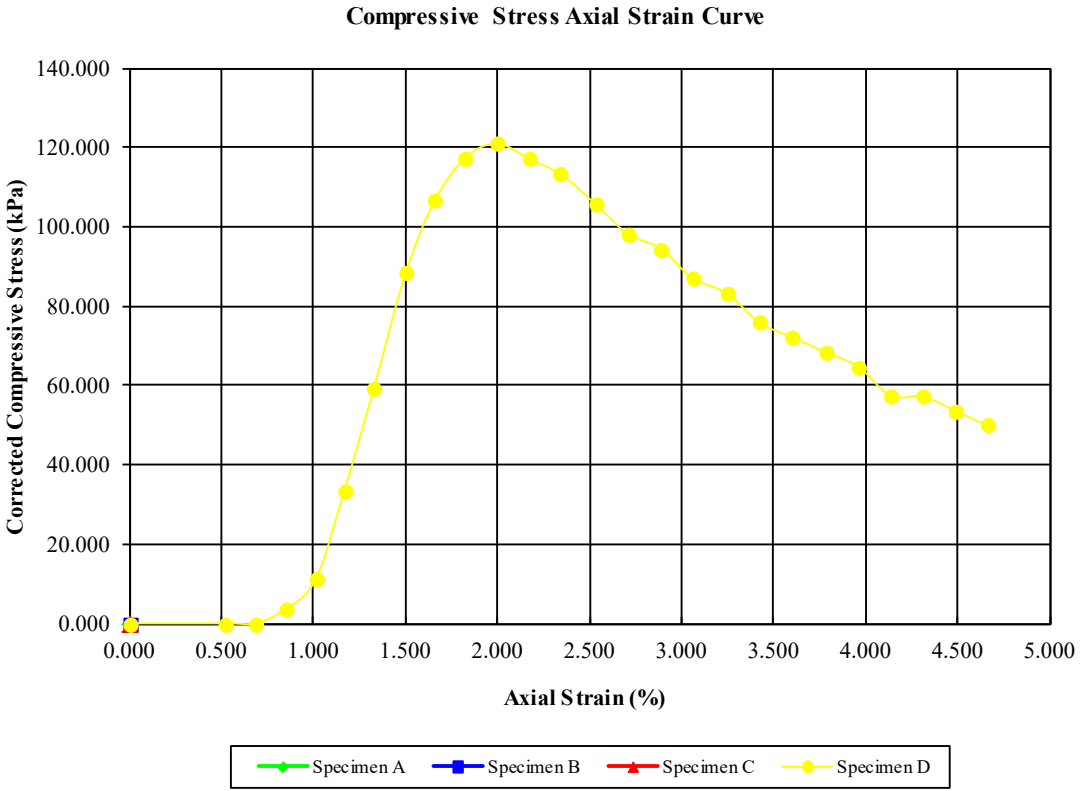
Rate of Strain (mm/min): 1.000000
Peak Corrected Compressive Stress (kPa): 219.182 at reading number: 9

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.367	0.007	0.000	0.000
1	0.541	0.015	0.174	3.732
2	0.711	0.015	0.344	3.726
3	0.892	0.015	0.525	3.719
4	1.064	0.029	0.697	11.138
5	1.230	0.081	0.863	37.065
6	1.395	0.147	1.028	70.307
7	1.558	0.264	1.190	129.300
8	1.720	0.374	1.352	184.411
9	1.891	0.447	1.524	219.182
10	2.067	0.389	1.699	191.113
11	2.249	0.316	1.882	154.075
12	2.416	0.264	2.049	128.176
13	2.440	0.264	2.073	128.145

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date
Checked By



Date
Computed By

Before Test	Specimen			
	A	B	C	D
Water Content (%)				0.00
Dry Density (g/cm ³)				0.000
Saturation (%)				0.00
Void Ratio				0.00
Diameter (mm)				50.000
Height (mm)				100.000
Test Data	A	B	C	D
Unconfined Strength (kPa)				120.912
Undrained Shear Strength (kgf/cm ²)				0.616
Undrained Shear Strength (kPa)				60.456
Rate of Strain (mm/min)				1.000000
Strain at Failure (%)				2.00

Date
Tested By

Description	
Project Information	Specimen Description
Project Num	Specimen A
Project	S4 TANAH ASLI 7H
Sampling Date	Specimen B
Sample #	Specimen C
Client	Specimen D
	S4 TANAH ASLI 7H
Test Variables	
Specific Gravity	2.65
Liquid Limit:	
Plastic Limit:	
Remarks	

S4 TANAH ASLI 7H
Specimen D Information
 Unconfined Test

POLSRI

File Location
 S4 TANAH ASLI 7h.HSD

Project Information

Project No.	Molding Date:
Project Name: S4 TANAH ASLI 7H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S4 TANAH ASLI 7H	Sample Depth:
Specimen Remarks:	

Specimen D Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.000	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.000	N/A
Void Ratio	0.000	N/A
Height-to-Diameter Ratio	2.000	N/A

Project S4 TANAH ASLI 7H Specimen D Test Data

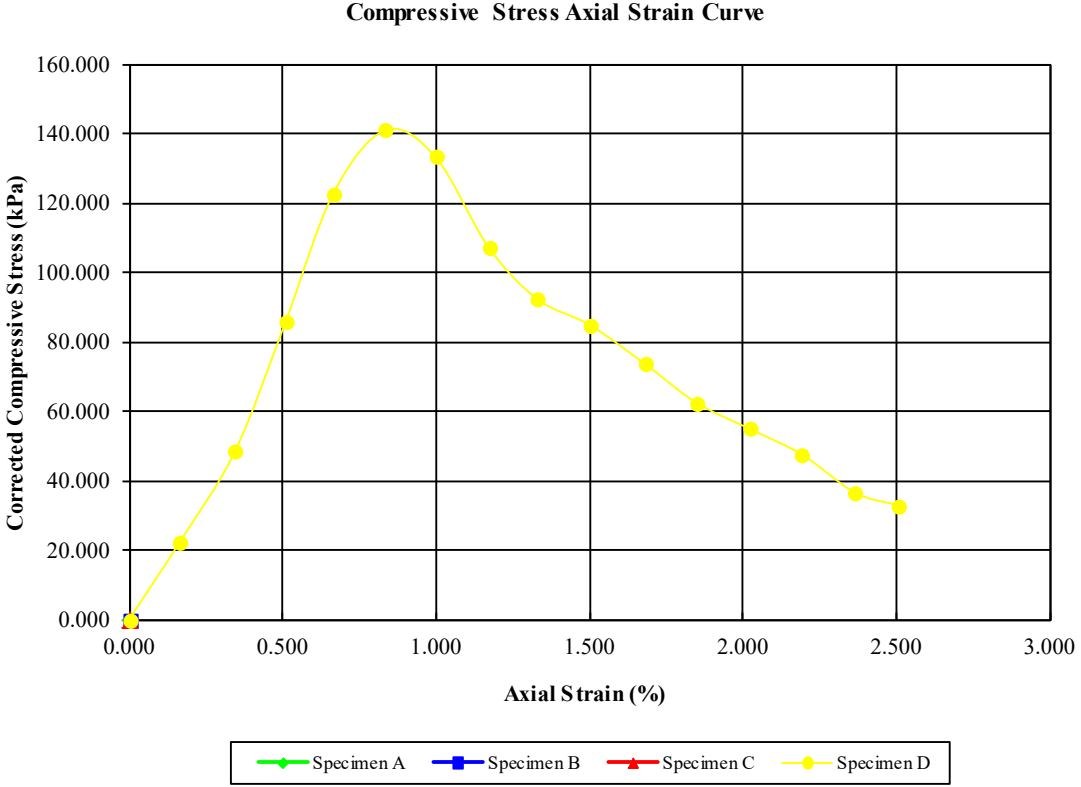
Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 120.912 at reading number: 10

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	1.510	0.103	0.000	0.000
1	2.028	0.103	0.518	0.000
2	2.196	0.103	0.686	0.000
3	2.364	0.11	0.854	3.707
4	2.524	0.125	1.014	11.103
5	2.677	0.169	1.167	33.256
6	2.838	0.22	1.328	59.026
7	3.012	0.279	1.503	88.383
8	3.171	0.316	1.661	106.624
9	3.338	0.338	1.828	117.455
10	3.511	0.345	2.001	120.912
11	3.684	0.338	2.174	117.041
12	3.855	0.33	2.345	113.185
13	4.043	0.316	2.534	105.678
14	4.217	0.301	2.707	98.215
15	4.399	0.294	2.889	94.400
16	4.571	0.279	3.061	86.984
17	4.757	0.272	3.247	83.200
18	4.933	0.257	3.424	75.827
19	5.114	0.25	3.604	72.081
20	5.294	0.242	3.784	68.349
21	5.472	0.235	3.962	64.632
22	5.648	0.22	4.138	57.345
23	5.821	0.22	4.311	57.242
24	5.998	0.213	4.488	53.565
25	6.171	0.206	4.662	49.903

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date
Checked By



Date
Computed By

Before Test	Specimen			
	A	B	C	D
Water Content (%)				0.00
Dry Density (g/cm ³)				0.000
Saturation (%)				0.00
Void Ratio				0.00
Diameter (mm)				50.000
Height (mm)				100.000
Test Data	A	B	C	D
Unconfined Strength (kPa)				140.889
Undrained Shear Strength (kgf/cm ²)				0.718
Undrained Shear Strength (kPa)				70.444
Rate of Strain (mm/min)				1.000000
Strain at Failure (%)				0.83

Date
Tested By

Description	
Project Information	Specimen Description
Project Num	Specimen A
Project	S4 SEMEN 2.5% 7H
Sampling Date	Specimen B
Sample #	Specimen C
Client	Specimen D
	S4 SEMEN 2.5%
Test Variables	
Specific Gravity	2.65
Liquid Limit:	
Plastic Limit:	
Remarks	

S4 SEMEN 2.5% 7H
Specimen D Information
 Unconfined Test

POLSRI

File Location
 S4 2.5% 7H.HSD

Project Information

Project No.
 Project Name: S4 SEMEN 2.5% 7H
 Client:
 Sample Location:
 Specimen Description: S4 SEMEN 2.5%
 Specimen Remarks:

Molding Date:
 Date Tested:
 Boring Number:
 Sample Number:
 Sample Depth:

Specimen D Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.000	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.000	N/A
Void Ratio	0.000	N/A
Height-to-Diameter Ratio	2.000	N/A

Project S4 SEMEN 2.5% 7H Specimen D Test Data

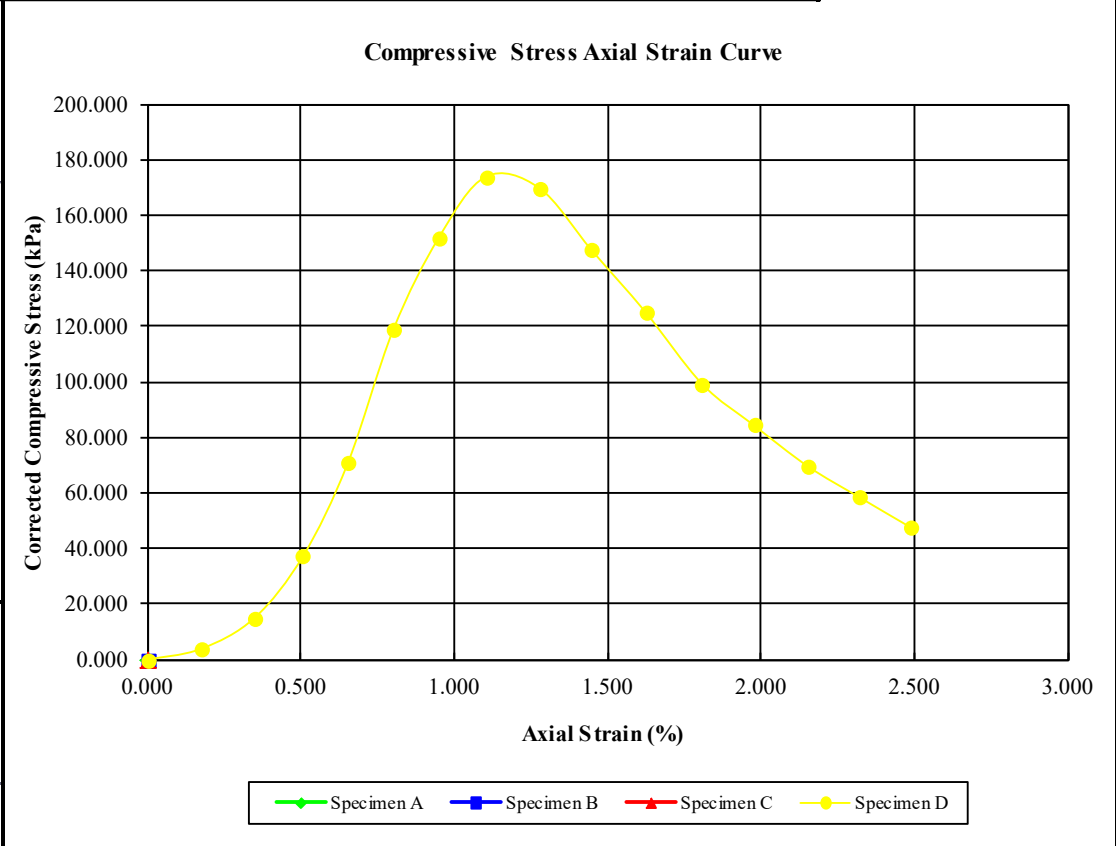
Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 140.889 at reading number: 5

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.244	0.103	0.000	0.000
1	0.410	0.147	0.166	22.396
2	0.590	0.198	0.345	48.437
3	0.754	0.272	0.509	85.554
4	0.909	0.345	0.665	122.560
5	1.079	0.382	0.834	140.889
6	1.243	0.367	0.998	133.253
7	1.417	0.316	1.172	107.154
8	1.576	0.286	1.331	92.225
9	1.748	0.272	1.503	84.699
10	1.927	0.25	1.682	73.518
11	2.094	0.228	1.850	62.384
12	2.265	0.213	2.021	54.949
13	2.437	0.198	2.192	47.539
14	2.611	0.176	2.366	36.503
15	2.752	0.169	2.507	32.806

POLSRI
Unconfined Compression Test Report (ASTMD2166)

Date

Checked By



Date

Computed By

Before Test	Specimen			
	A	B	C	D
Water Content (%)				0.00
Dry Density (g/cm ³)				0.000
Saturation (%)				0.00
Void Ratio				0.00
Diameter (mm)				50.000
Height (mm)				100.000
Test Data	A	B	C	D
Unconfined Strength (kPa)				173.784
Undrained Shear Strength (kgf/cm ²)				0.886
Undrained Shear Strength (kPa)				86.892
Rate of Strain (mm/min)				1.000000
Strain at Failure (%)				1.10

Date

Tested By

Description	
Project Information	Specimen Description
Project Num	Specimen A
Project	Specimen B
Sampling Date	Specimen C
Sample #	Specimen D
Client	S4 SEMEN 5% 7H
	Test Variables
	Specific Gravity: 2.65
	Liquid Limit:
	Plastic Limit:
Remarks	

S4 SEMEN 5% 7H
Specimen D Information
 Unconfined Test

POLSRI

File Location
 S4 5% 7H.HSD

Project Information

Project No.	Molding Date:
Project Name: S4 SEMEN 5% 7H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S4 SEMEN 5% 7H	Sample Depth:
Specimen Remarks:	

Specimen D Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.000	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.000	N/A
Void Ratio	0.000	N/A
Height-to-Diameter Ratio	2.000	N/A

Project S4 SEMEN 5% 7H Specimen D Test Data

Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 173.784 at reading number: 7

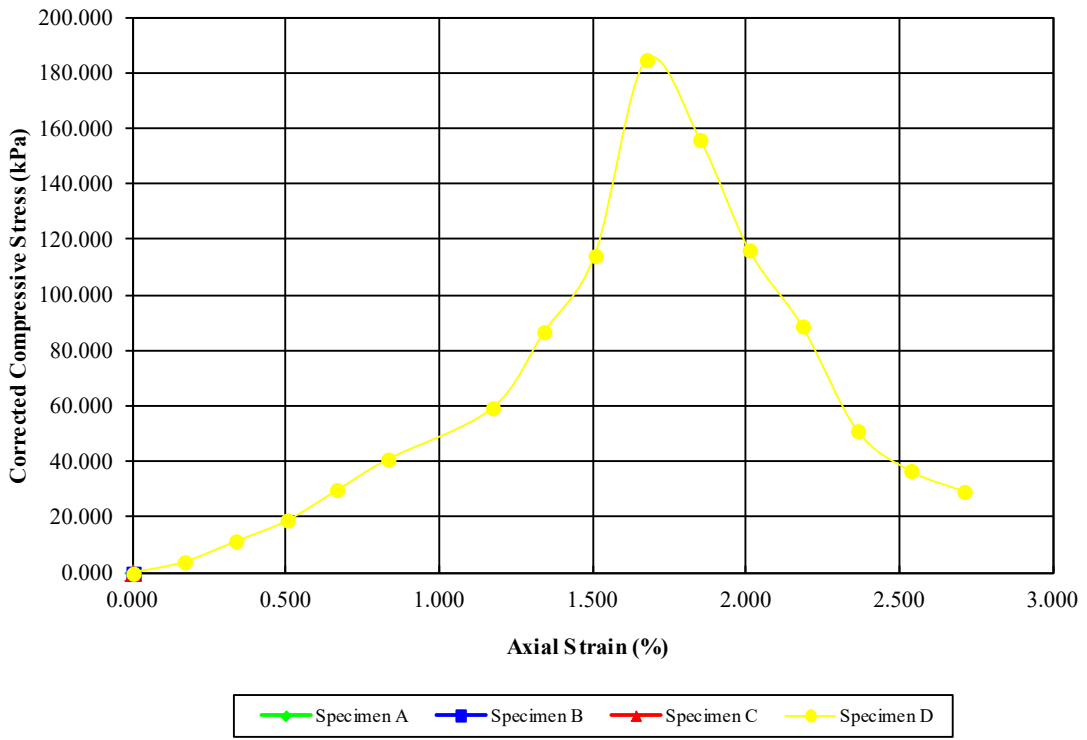
Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.140	0.073	0.000	0.000
1	0.315	0.081	0.175	3.732
2	0.490	0.103	0.350	14.903
3	0.648	0.147	0.508	37.198
4	0.794	0.213	0.654	70.573
5	0.942	0.308	0.802	118.682
6	1.091	0.374	0.950	151.834
7	1.243	0.418	1.103	173.784
8	1.417	0.411	1.277	169.788
9	1.589	0.367	1.449	147.385
10	1.764	0.323	1.624	125.054
11	1.949	0.272	1.809	99.121
12	2.118	0.242	1.978	84.291
13	2.294	0.213	2.154	69.507
14	2.460	0.191	2.320	58.433
15	2.631	0.169	2.491	47.394

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date
Checked By
Date
Computed By
Date
Tested By

Compressive Stress Axial Strain Curve



Before Test	Specimen			
	A	B	C	D
Water Content (%)				0.00
Dry Density (g/cm ³)				0.000
Saturation (%)				0.00
Void Ratio				0.00
Diameter (mm)				50.000
Height (mm)				100.000
Test Data	A	B	C	D
Unconfined Strength (kPa)				184.347
Undrained Shear Strength (kgf/cm ²)				0.940
Undrained Shear Strength (kPa)				92.173
Rate of Strain (mm/min)				1.000000
Strain at Failure (%)				1.67
Description				
Project Information		Specimen Description		
Project Num		Specimen A		
Project	S4 SEMEN 7.5% 7H	Specimen B		
Sampling Date		Specimen C		
Sample #		Specimen D	S4 SEMEN 7.5% 7H	
Client		Test Variables		
		Specific Gravity	2.65	
		Liquid Limit:		
		Plastic Limit:		
Remarks				

S4 SEMEN 7.5% 7H
Specimen D Information
 Unconfined Test

POLSR I

File Location
 S4 7.5% 7H.HSD

Project Information

Project No.	Molding Date:
Project Name: S4 SEMEN 7.5% 7H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S4 SEMEN 7.5% 7H	Sample Depth:
Specimen Remarks:	

Specimen D Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.000	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.000	N/A
Void Ratio	0.000	N/A
Height-to-Diameter Ratio	2.000	N/A

Project S4 SEMEN 7.5% 7H Specimen D Test Data

Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 184.347 at reading number: 9

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.618	0.066	0.000	0.000
1	0.786	0.073	0.168	3.733
2	0.955	0.088	0.337	11.179
3	1.122	0.103	0.504	18.600
4	1.287	0.125	0.669	29.710
5	1.452	0.147	0.834	40.784
6	1.791	0.184	1.173	59.119
7	1.959	0.273	1.341	86.396
8	2.126	0.281	1.508	114.347
9	2.292	0.429	1.674	184.347
10	2.469	0.372	1.851	156.053
11	2.630	0.284	2.012	115.944
12	2.803	0.236	2.185	88.514
13	2.981	0.169	2.363	51.106
14	3.157	0.139	2.539	36.439
15	3.330	0.125	2.712	29.099

POLSRI

Unconfined Compression Test Report (ASTMD2166)

Date

Checked By

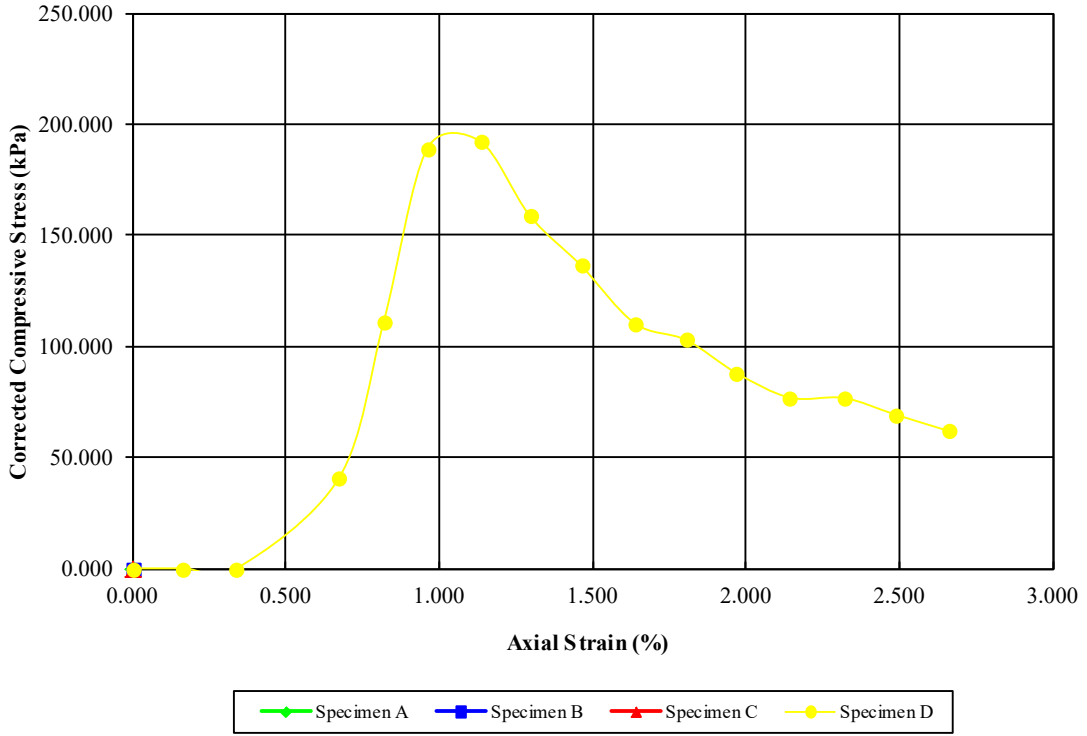
Date

Computed By

Date

Tested By

Compressive Stress Axial Strain Curve



Before Test	Specimen			
	A	B	C	D
Water Content (%)				0.00
Dry Density (g/cm ³)				0.000
Saturation (%)				0.00
Void Ratio				0.00
Diameter (mm)				50.000
Height (mm)				100.000
Test Data	A	B	C	D
Unconfined Strength (kPa)				192.212
Undrained Shear Strength (kgf/cm ²)				0.980
Undrained Shear Strength (kPa)				96.106
Rate of Strain (mm/min)				1.000000
Strain at Failure (%)				1.13
Description				
Project Information		Specimen Description		
Project Num		Specimen A		
Project	S3 SEMEN 10% 7H	Specimen B		
Sampling Date		Specimen C		
Sample #		Specimen D	S3 SEMEN 10% 7H	
Client		Test Variables		
		Specific Gravity	2.65	
		Liquid Limit:		
		Plastic Limit:		
Remarks				

S3 SEMEN 10% 7H
Specimen D Information
 Unconfined Test

POLSRI

File Location
 S3 10% 7H.HSD

Project Information

Project No.	Molding Date:
Project Name: S3 SEMEN 10% 7H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S3 SEMEN 10% 7H	Sample Depth:
Specimen Remarks:	

Specimen D Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.000	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.000	N/A
Void Ratio	0.000	N/A
Height-to-Diameter Ratio	2.000	N/A

Project S3 SEMEN 10% 7H Specimen D Test Data

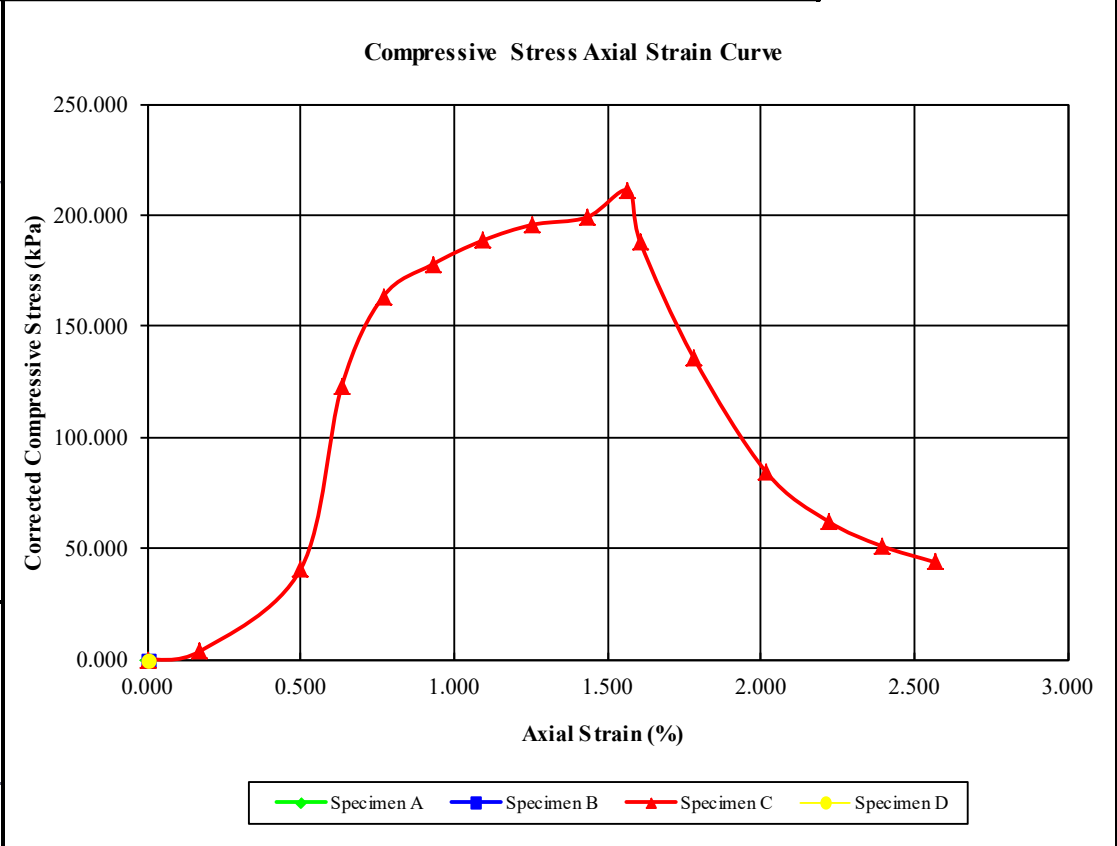
Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 192.212 at reading number: 6

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.844	0.059	0.000	0.000
1	1.011	0.059	0.167	0.000
2	1.185	0.059	0.341	0.000
3	1.519	0.139	0.675	40.849
4	1.665	0.279	0.820	111.244
5	1.806	0.433	0.961	188.845
6	1.979	0.44	1.134	192.212
7	2.141	0.374	1.297	158.684
8	2.307	0.33	1.463	136.311
9	2.482	0.279	1.638	110.326
10	2.650	0.264	1.806	102.796
11	2.814	0.235	1.970	87.964
12	2.989	0.213	2.144	76.831
13	3.164	0.213	2.319	76.694
14	3.331	0.198	2.487	69.270
15	3.505	0.184	2.661	61.868

POLSRI
Unconfined Compression Test Report (ASTMD2166)

Date

Checked By



Date

Computed By

	Specimen			
Before Test	A	B	C	D
Water Content (%)			0.00	
Dry Density (g/cm ³)			0.000	
Saturation (%)			0.00	
Void Ratio			0.00	
Diameter (mm)			50.000	
Height (mm)			100.000	
Test Data	A	B	C	D
Unconfined Strength (kPa)			211.105	
Undrained Shear Strength (kgf/cm ²)			1.076	
Undrained Shear Strength (kPa)			105.552	
Rate of Strain (mm/min)			1.000000	
Strain at Failure (%)			1.57	

Date

Tested By

Description	
Project Information	Specimen Description
Project Num	Specimen A
Project	Specimen B
Sampling Date	Specimen C
Sample #	Specimen D
Client	Test Variables
	Specific Gravity
	Liquid Limit:
	Plastic Limit:
Remarks	

S1 SEMEN 12.5% 7H
Specimen C Information
 Unconfined Test

POLSRI

File Location
 S1 12.5% 7H.HSD

Project Information

Project No.	Molding Date:
Project Name: S1 SEMEN 12.5% 7H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S1 SEMEN 12.5% 7H	Sample Depth:
Specimen Remarks:	

Specimen C Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.00	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.00	N/A
Void Ratio	0.00	N/A
Height-to-Diameter Ratio	2.00	N/A

Project S1 SEMEN 12.5% 7H Specimen C Test Data

Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 211.105 at reading number: 9

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.822	0.059	0.000	0.000
1	0.995	0.066	0.173	3.732
2	1.324	0.139	0.502	40.920
3	1.456	0.301	0.634	122.598
4	1.591	0.382	0.769	163.242
5	1.753	0.411	0.930	177.793
6	1.917	0.433	1.095	188.590
7	2.080	0.448	1.258	195.663
8	2.256	0.455	1.434	199.000
9	2.390	0.473	1.568	211.105
10	2.430	0.433	1.608	187.613
11	2.603	0.33	1.781	135.872
12	2.840	0.228	2.018	84.257
13	3.042	0.184	2.220	62.149
14	3.215	0.162	2.393	51.091
15	3.391	0.147	2.568	43.713

POLSRI
Unconfined Compression Test Report (ASTMD2166)

Date

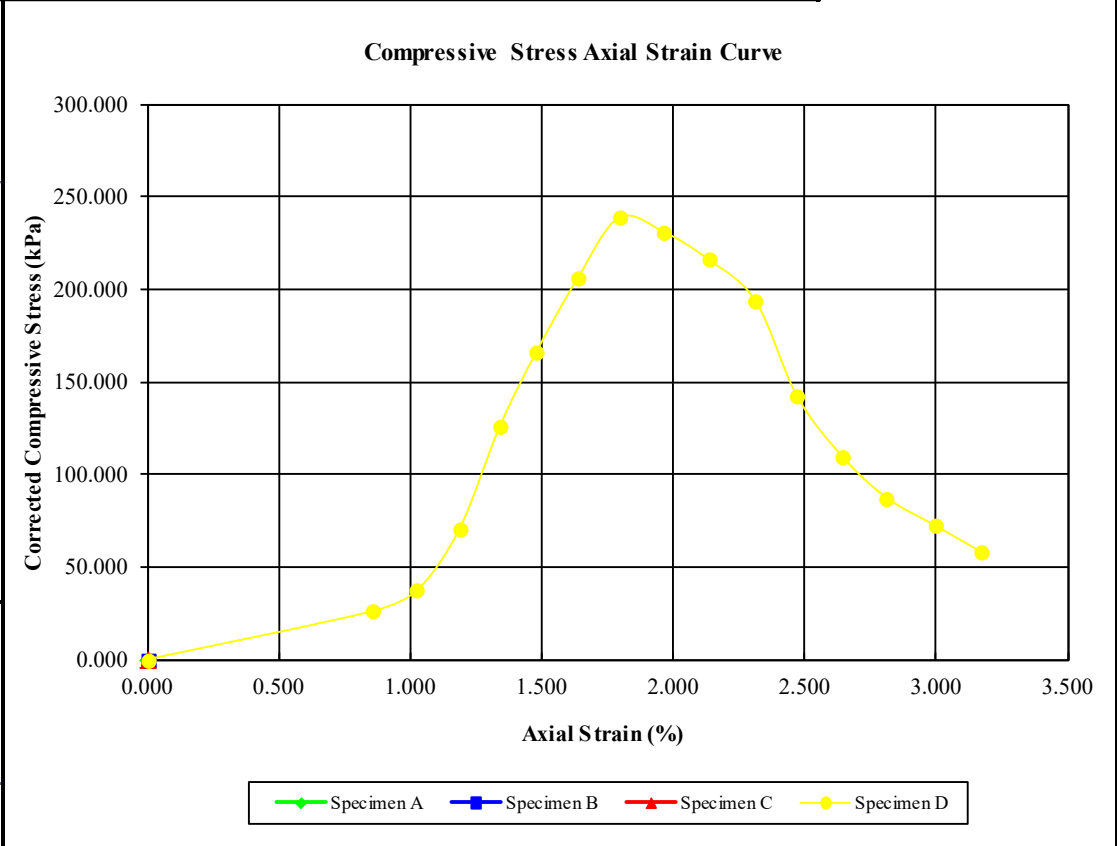
Checked By

Date

Computed By

Date

Tested By



	Specimen			
	A	B	C	D
Before Test				
Water Content (%)				0.00
Dry Density (g/cm ³)				0.000
Saturation (%)				0.00
Void Ratio				0.00
Diameter (mm)				50.000
Height (mm)				100.000
Test Data	A	B	C	D
Unconfined Strength (kPa)				238.660
Undrained Shear Strength (kgf/cm ²)				1.217
Undrained Shear Strength (kPa)				119.330
Rate of Strain (mm/min)				1.000000
Strain at Failure (%)				1.79
Description				
Project Information		Specimen Description		
Project Num		Specimen A		
Project	S4 SEMEN 15% 7H	Specimen B		
Sampling Date		Specimen C		
Sample #		Specimen D		S4 SEMEN 15% 7H
Client		Test Variables		
		Specific Gravity		2.65
		Liquid Limit:		
		Plastic Limit:		
Remarks				

S4 SEMEN 15% 7H
Specimen D Information
 Unconfined Test

POLSRI

File Location
 S4 15% 7H.HSD

Project Information

Project No.	Molding Date:
Project Name: S4 SEMEN 15% 7H	Date Tested:
Client:	Boring Number:
Sample Location:	Sample Number:
Specimen Description: S4 SEMEN 15% 7H	Sample Depth:
Specimen Remarks:	

Specimen D Sample Data

Sample Type: Undisturbed
 Specific Gravity: 2.650 Assumed LL: PL:

Sample Parameters	Before Test	After Test
Diameter (mm)	50.000	N/A
Height (mm)	100.000	N/A
Weight (g)	0.000	N/A
Moisture (%)	0.000	N/A
Dry Density (g/cm ³)	0.000	N/A
Saturation (%)	0.000	N/A
Void Ratio	0.000	N/A
Height-to-Diameter Ratio	2.000	N/A

Project S4 SEMEN 15% 7H Specimen D Test Data

Rate of Strain (mm/min): 1.000000
 Peak Corrected Compressive Stress (kPa): 238.660 at reading number: 7

Read Number	Disp (mm)	Load (Kn)	Strain (%)	Corr. Comp. Stress (kPa)
0	0.507	0.051	0.000	0.000
1	0.855	0.051	0.855	25.994
2	1.024	0.073	1.024	37.005
3	1.187	0.139	1.187	70.194
4	1.340	0.25	1.340	125.416
5	1.479	0.33	1.479	165.758
6	1.637	0.411	1.637	205.945
7	1.795	0.477	1.795	238.660
8	1.965	0.462	1.965	230.916
9	2.136	0.433	2.136	215.877
10	2.314	0.389	2.314	193.571
11	2.471	0.286	2.471	142.209
12	2.646	0.22	2.646	109.196
13	2.813	0.176	2.813	87.207
14	2.994	0.147	2.994	72.537
15	3.174	0.117	3.174	57.922