DAFTAR ISI

HALAMAN PENGESAHAN

SANWACANA ........................................................................................................ i

DAFTAR ISI ........................................................................................................ iii

DAFTAR TABEL ................................................................................................ vii

DAFTAR GAMBAR ............................................................................................... viii

DAFTAR NOTASI ................................................................................................ x

I. PENDAHULUAN

A. Latar Belakang ................................................................................................. 1

B. Batasan Masalah ............................................................................................. 3

C. Lokasi ............................................................................................................... 4

D. Tujuan Penelitian ............................................................................................ 5

E. Manfaat Penelitian ......................................................................................... 5

II. TINJAUAN PUSTAKA

A. Tanah ............................................................................................................. 7

B. Klasifikasi Tanah ............................................................................................ 9

C. Tanah Organik .............................................................................................. 13
D. Sifat – sifat Fisik Tanah ................................................................. 19
E. Kemampumampatan Tanah Gambut .............................................. 21
F. Sifat Kembang Susut (Swelling) .................................................. 22
G. Penurunan .................................................................................. 23
H. Konsolidasi ................................................................................ 24
I. Analisa Konsolidasi Satu Dimensi .................................................. 25
J. Pengaruh Gangguan Benda Uji pada Grafik e-log p ....................... 29
K. Landasan Teori ........................................................................... 32
   1. Pengujian Konsolidasi ............................................................... 33
   2. Interpretasi Hasil Pengujian Konsolidasi ............................... 35
   3. Koefisien Pemampatan dan Koefisien Perubahan Volume ....... 36
   4. Indeks Pemampatan (Cc) ............................................................ 39
   5. Koefisien Konsolidasi (Cv) ........................................................ 41
   6. Metode Kecocokan Waktu Log = Waktu ............................... 42
   7. Metode Akar Waktu .................................................................. 44
   8. Derajat Kejenuhan .................................................................... 46
   8. Konsolidasi Sekunder ............................................................... 47

III. METODE PENELITIAN

A. Sempel Tanah .............................................................................. 49
B. Pelaksanaan Pengujian ................................................................. 49
C. Pelaksanaan Pengujian di Laboratorium ..................................... 50
   1. Pengujian Sifat Kimia Tanah .................................................... 50
D. Prosedur Pengujian Utama .................................................. 60
E. Analisis Data ........................................................................... 64

IV. HASIL DAN PEMBAHASAN

A. Uji Fisik .............................................................................. 66
1. Analisa Hasil Pengujian Kadar Air ........................................... 67
2. Analisa Hasil Pengujian Berat Volume ..................................... 67
3. Analisa Hasil Pengujian Berat Jenis ........................................ 68
4. Uji Berat Volume ................................................................... 68
5. Uji Analisa Saringan .............................................................. 69
6. Data Hasil Pengujian Pemadatan Tanah ................................. 71
7. Data Hasil Perhitungan Derajat Kejenuhan ............................ 71
B. Uji Kimia ................................................................. 74
   1. Kadar Organik .......................................................... 74
   2. Kadar Abu ............................................................. 74
   3. Kadar Serat ............................................................ 75
C. Klasifikasi Tanah .......................................................... 75
   1. Klasifikasi Sistem USCS ........................................... 75
D. Analisis Hasil Pengujian Konsolidasi ................................. 77
   1. Hasil Pengujian Konsolidasi ........................................ 77
E. Variasi Hubungan Persentase Derajat Kejenuhan dengan Nilai Cv, Cc, aV ... 81
   1. Hubungan Persentase Derajat Kejenuhan dengan Nilai Cv ............... 81
   2. Hubungan Persentase Derajat Kejenuhan dengan Nilai Cc ................. 82
   3. Hubungan Persentase Derajat Kejenuhan dengan Nilai aV ............... 83

V. PENUTUP

A. Simpulan ................................................................. 88
   B. Saran ...................................................................... 90

DAFTAR PUSTAKA

LAMPIRAN