



Lampiran 1

Kode List Program Tampilan Utama

```
Dim db As ADODB.Connection
Dim rs As ADODB.Recordset

Public sql As String

Sub koneksi()
Set db = New ADODB.Connection
db.CursorLocation = adUseClient
db.Open "proyek_ta"
End Sub

Public Sub SetLV_CPT()
With ListView1
    .View = lvwReport
    .GridLines = True
    .MultiSelect = True
    .FullRowSelect = True
    .HotTracking = True
    .HoverSelection = True
    ' tambahkan kolom2 ke , Judul,lebar,aligment
    .ColumnHeaders.Add 1, , "ID Proyek", 1000
    .ColumnHeaders.Add 2, , "ID Titik", 1000
    .ColumnHeaders.Add 3, , "Kedalaman (m)", 1500
    .ColumnHeaders.Add 4, , "Conus", 1500
    .ColumnHeaders.Add 5, , "Conus+Cleeve", 1500
    .ColumnHeaders.Add 6, , "Keterangan Tanah", 1800
End With
End Sub
```



End With

End Sub

Public Sub SetLV_SPT()

With ListView2

.View = lvwReport

.GridLines = True

.MultiSelect = True

.FullRowSelect = True

.HotTracking = True

.HoverSelection = True

' tambahkan kolom2 ke , , Judul,lebar,aligment

.ColumnHeaders.Add 1, , "ID Proyek", 1000

.ColumnHeaders.Add 2, , "ID Titik", 1000

.ColumnHeaders.Add 3, , "Kedalaman (m)", 1500

.ColumnHeaders.Add 4, , "N1", 500

.ColumnHeaders.Add 5, , "N2", 500

.ColumnHeaders.Add 6, , "N3", 500

.ColumnHeaders.Add 7, , "N", 700

.ColumnHeaders.Add 8, , "Keterangan Tanah", 1800

End With

End Sub

Public Sub SetLV_ujilab()

Set rs = New Recordset



If db.State <> 1 Then koneksi

With ListView3

.View = lvwReport

.GridLines = True

.MultiSelect = True

.FullRowSelect = True

.HotTracking = True

.HoverSelection = True

' tambahkan kolom2 ke , Judul,lebar,aligment

.ColumnHeaders.Add 1 , "ID Proyek", 1000

.ColumnHeaders.Add 2 , "ID Titik", 1000

.ColumnHeaders.Add 3 , "Sudut Gesek", 1200

.ColumnHeaders.Add 4 , "Kohesi", 1000

.ColumnHeaders.Add 5 , "Berat Volume Basah", 1800

.ColumnHeaders.Add 6 , "Berat Volume Jenuh", 1800

.ColumnHeaders.Add 7 , "Muka Air Tanah", 1500

End With

End Sub

Private Sub tampilkan_CPT()

Set rs = New Recordset

If db.State <> 1 Then koneksi

rs.Open "select * from tabel_cpt where id_proyek='" & Combo1 & "'", db,
adOpenDynamic, adLockOptimistic

Dim Lst As ListItem, nmr As Integer

With rs



```
ListView1.ListItems.Clear 'Bersihkan Listview  
  
Do While Not rs.EOF  
  
Set Lst = ListView1.ListItems.Add  
  
Lst.Text = rs!id_proyek 'isi kolom 1 dng nmr  
  
Lst.SubItems(1) = rs!id_titik  
  
Lst.SubItems(2) = rs!Kedalaman  
  
Lst.SubItems(3) = rs!Conus 'kol 3 dng nma  
  
Lst.SubItems(4) = rs!ConusCleeve 'kol 4 Hbeli  
  
Lst.SubItems(5) = rs!ket_tanah 'kol 5 Hjual  
  
  
rs.MoveNext 'gerakan kursor de data berikutnya  
Loop  
End With  
Set rs = Nothing  
  
End Sub  
Private Sub tampilkan_SPT()  
Set rs = New Recordset  
  
If db.State <> 1 Then koneksi  
  
rs.Open "SELECT * FROM tabel_spt WHERE id_proyek=" & Combo1 & "", db,  
adOpenDynamic, adLockOptimistic
```

```
Dim Lst As ListItem, nmr As Integer
```

```
With rs
```

```
ListView2.ListItems.Clear 'Bersihkan Listview
```

```
Do While Not rs.EOF
```



```
Set Lst = ListView2.ListItems.Add

Lst.Text = rs!id_proyek 'isi kolom 1 dng nmr

Lst.SubItems(1) = rs!id_titik 'isi Kol 2 dng Kode Barang

Lst.SubItems(2) = rs!Kedalaman

Lst.SubItems(3) = rs!N1 'kol 3 dng nma

Lst.SubItems(4) = rs!N2 'kol 4 Hbeli

Lst.SubItems(5) = rs!N3 'kol 5 Hjual

Lst.SubItems(6) = rs!N 'kol 6 Stok

Lst.SubItems(7) = rs!ket_tanah

rs.MoveNext 'gerakan kursor ke data berikutnya

Loop

End With

Set rs = Nothing

End Sub

Private Sub tampilkan_ujilab()

Set rs = New Recordset

If db.State <> 1 Then koneksi

rs.Open "select * from tabel_ujilab where id_proyek='" & Combo1 & "'", db,
adOpenDynamic, adLockOptimistic

Dim Lst As ListItem, nmr As Integer

With rs

ListView3.ListItems.Clear 'Bersihkan Listview

Do While Not rs.EOF

Set Lst = ListView3.ListItems.Add
```



```
Lst.Text = rs!id_proyek 'isi kolom 1 dng nmr
```

```
Lst.SubItems(1) = rs!id_titik
```

```
Lst.SubItems(2) = rs!SG
```

```
Lst.SubItems(3) = rs!kohesi 'kol 3 dng nma
```

```
Lst.SubItems(4) = rs!BVB 'kol 4 Hbeli
```

```
Lst.SubItems(5) = rs!BVJ 'kol 5 Hjual
```

```
Lst.SubItems(6) = rs!MAT 'kol 6 Stok
```

```
rs.MoveNext 'gerakan kursor de data berikutnya
```

```
Loop
```

```
End With
```

```
Set rs = Nothing
```

```
End Sub
```

```
Private Sub btn_data_Click()
```

```
Form1.Enabled = False
```

```
FrmEditPro.Show
```

```
End Sub
```

```
Private Sub btn_inputCPT_Click()
```

```
Form1.Enabled = False
```

```
FormUjiCPT.Show
```

```
End Sub
```



```
Private Sub btn_inputLAB_Click()
```

```
Form1.Enabled = False
```

```
FormUjiLab.Show
```

```
End Sub
```

```
Private Sub btn_inputSPT_Click()
```

```
Form1.Enabled = False
```

```
FormUjiSPT.Show
```

```
End Sub
```

```
Private Sub btn_projek_Click()
```

```
Unload Me
```

```
Form2.Show
```

```
End Sub
```

```
Private Sub Combo1_Click()
```

```
Call koneksi
```

```
Set rs = New Recordset
```

```
rs.Open "select * from tabel_projek where id_proyek=" & Left(Combo1.Text, 5) & """,  
db, adOpenDynamic, adLockOptimistic
```

```
rs.Requery
```

```
With rs
```

```
If .EOF And .BOF Then
```

```
    MsgBox "ID tidak ditemukan", vbOKOnly
```

```
    Exit Sub
```

```
Else
```

```
    Text1.Text = rs.Fields("nama_projek")
```



```
Text2.Text = rs.Fields("test_oleh")
Text3.Text = rs.Fields("test_tanggal")
Text4.Text = rs.Fields("lokasi_projek")
Text5.Text = rs.Fields("Keterangan")
Text6.Text = rs.Fields("id_projek")

End If

End With

rs.Close

btn_inputCPT.Enabled = True
btn_inputSPT.Enabled = True
btn_inputLAB.Enabled = True

Call tampilkan_CPT

Call tampilkan_SPT
Call tampilkan_ujilab

End Sub

Private Sub Form_Load()

Call koneksi

Combo1.Clear

Set rs = New Recordset

rs.Open "SELECT * FROM tabel_projek", db, adOpenDynamic, adLockOptimistic

Do Until rs.EOF

Combo1.AddItem rs!id_projek & Space(5) & rs!nama_projek
```




rs.MoveNext

Loop

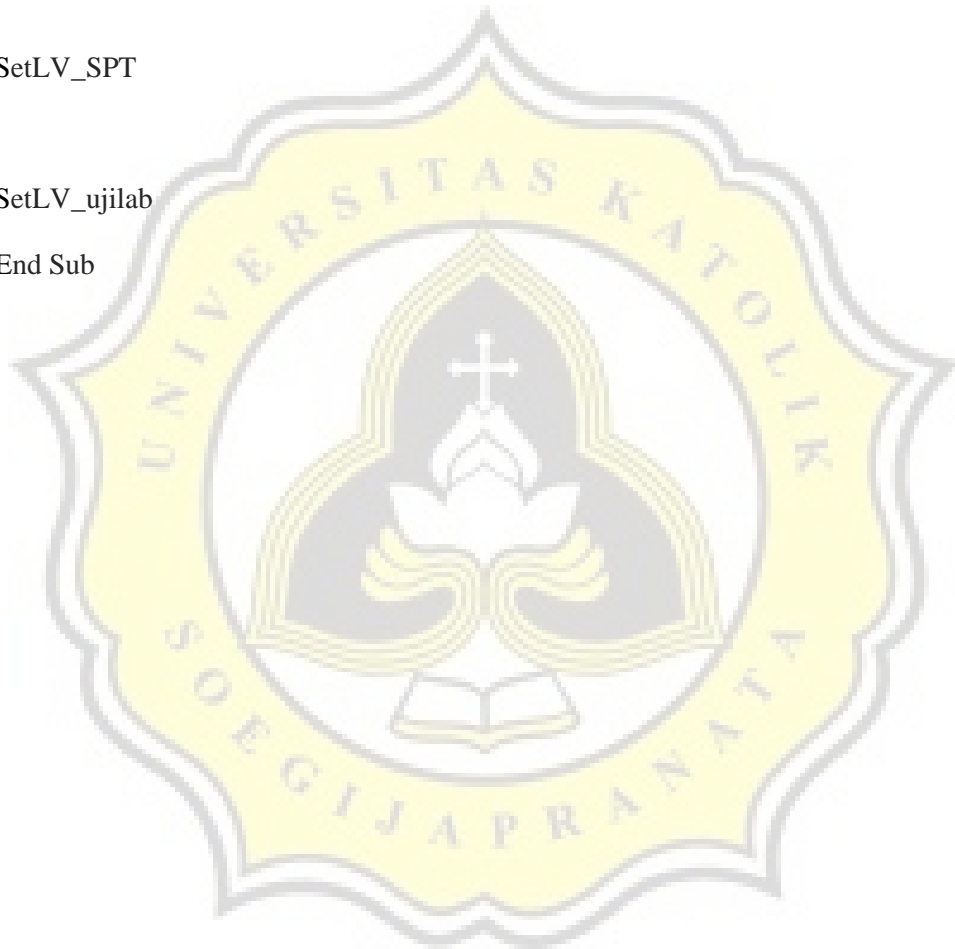
rs.Close

SetLV_CPT

SetLV_SPT

SetLV_ujilab

End Sub







Lampiran 2

Kode List Program UJI LAB

Dim db As ADODB.Connection

Dim rs As ADODB.Recordset

Sub koneksi()

Set db = New ADODB.Connection

db.CursorLocation = adUseClient

db.Open "proyek_ta"

End Sub

Private Sub btn_analisa_Click()

On Error GoTo eror

Dim c As Single

Dim SG As Single

Dim df As Single

Dim BVB As Single

Dim BVJ As Single

Dim B As Single

Dim L As Single

Dim Dw As Single

Dim Fk As Byte

'simbol

SG = Text1.Text

c = Text2.Text



df = Text13.Text

BVB = Text4.Text

BVJ = Text5.Text

B = Text6.Text

L = Text7.Text

Dw = Text8.Text

Fk = Text34.Text

'-----'

'mencair nilai Nq

e = 2.718281828

N1 = (45 + (SG / 2))

N2 = 2 * Math.Cos(N1 * (22 / 7) / 180) ^ 2

N3 = Math.Tan(SG * (22 / 7) / 180)

N4 = e ^ (2 * (22 / 7) * (0.75 - (SG / 360)) * N3)

N5 = 2 * Math.Cos(N1 * (22 / 7) / 180) ^ 2

Nq = N4 / N5

'mencari nilai Nc

Nc = (Nq - 1) / N3

'mencari nilai Ng

Ng = (2 * (Nq + 1) * Math.Tan(SG * (22 / 7) / 180)) / (1 + 0.4 * Math.Sin(4 * SG * (22 / 7) / 180))

'Keruntuhan geser lokal

'mencair nilai Nq'

e = 2.718281828

c1 = (2 / 3) * c

sg1 = Math.Atn((2 / 3) * (Math.Tan(SG * (22 / 7) / 180))) * 180 / (22 / 7)



$$NL1 = (45 + (sg1 / 2))$$

$$NL2 = 2 * \text{Math.Cos}(NL1 * (22 / 7) / 180) ^ 2$$

$$NL3 = \text{Math.Tan}(sg1 * (22 / 7) / 180)$$

$$NL4 = e ^ (2 * (22 / 7) * (0.75 - (sg1 / 360))) * NL3$$

$$NL5 = 2 * \text{Math.Cos}(NL1 * (22 / 7) / 180) ^ 2$$

$$NqL = NL4 / NL5$$

'mencari nilai Nc'

$$NcL = (NqL - 1) / NL3$$

'mencari nilai Ng'

$$NgL = (2 * (NqL + 1) * \text{Math.Tan}(sg1 * (22 / 7) / 180)) / (1 + 0.4 * \text{Math.Sin}(4 * sg1 * (22 / 7) / 180))$$

$$po2 = df * BVB$$

'-----'

'Dw tepat pada posisi / sama Df'

'-----'

'PONDASI MEMANJANG'

'keruntuhan geser umum'

'qu:

$$TquM = (c * Nc) + (po2 * Nq) + (0.5 * BVB * B * Ng)$$

'qun:

$$TqunM = (c * Nc) + (po2 * (Nq - 1)) + (0.5 * BVB * B * Ng)$$

'Keruntuhan geser lokal'

'qu':

$$TquLM = (c1 * NcL) + (po2 * NqL) + (0.5 * BVB * B * NgL)$$

'qun':

$$TqunLM = (c1 * NcL) + (po2 * (NqL - 1)) + (0.5 * BVB * B * NgL)$$



PONDASI BUJUR-SANGKAR-----

-

'Keruntuhan geser umum

'qu:

$$TquBS = (1.3 * c * Nc) + (po2 * Nq) + (0.4 * BVB * B * Ng)$$

'qun :

$$TqunBS = (1.3 * c * Nc) + (po2 * (Nq - 1)) + (0.4 * BVB * B * Ng)$$

'Keruntuhan geser lokal

'qu':

$$TquLBS = (1.3 * c1 * NcL) + (po2 * NqL) + (0.4 * BVB * B * NgL)$$

'qun':

$$TqunLBS = (1.3 * c1 * NcL) + (po2 * (NqL - 1)) + (0.4 * BVB * B * NgL)$$

PONDASI PERSEGI EMPAT MEMANJANG-----

'Keruntuhan geser umum

'qu:

$$TquPEM = (c * Nc * (1 + 0.3 * (B / L))) + (po2 * Nq) + (0.5 * BVB * B * Ng * (1 - 0.2 * (B / L)))$$

'qun:

$$TqunPEM = (c * Nc * (1 + 0.3 * (B / L))) + (po2 * (Nq - 1)) + (0.5 * BVB * B * Ng * (1 - 0.2 * (B / L)))$$

'Keruntuhan geser lokal

'qu':

$$TquLPEM = (c1 * NcL * (1 + 0.3 * (B / L))) + (po2 * NqL) + (0.5 * BVB * B * NgL * (1 - 0.2 * (B / L)))$$

'qun':

$$TqunLPEM = (c1 * NcL * (1 + 0.3 * (B / L))) + (po2 * (NqL - 1)) + (0.5 * BVB * B * NgL * (1 - 0.2 * (B / L)))$$



PONDASI LINGKARAN-----

'Keruntuhan geser umum

'qu:

$$TquLKN = (1.3 * c * Nc) + (po2 * Nq) + (0.3 * BVB * B * Ng)$$

'qun:

$$TqunLKN = (1.3 * c * Nc) + (po2 * (Nq - 1)) + (0.3 * BVB * B * Ng)$$

'Keruntuhan geser lokal

'qu':

$$TquLLKN = (1.3 * c1 * NcL) + (po2 * NqL) + (0.3 * BVB * B * NgL)$$

'qun':

$$TqunLLKN = (1.3 * c1 * NcL) + (po2 * (NqL - 1)) + (0.3 * BVB * B * NgL)$$

MsgBox "Beban maksimum persatuan luas tanah dapat menopang beban (Pondasi Memanjang)" & Chr(10) & "qu : " & Text9.Text & Chr(10) & " qun : " & Text10.Text & Chr(10) & "qu' : " & Text11.Text & Chr(10) & "qun' : " & Text12.Text & Chr(10) & "Apakah benar hasil beban maksimum tersebut?", vbYesNo + vbInformation, "Hasil qu, Dw berada tepat atau sama dengan Df"

Text9.Text = TquM

Text10.Text = TqunM

Text11.Text = TquLM

Text12.Text = TqunLM

Text19.Text = TquBS

Text20.Text = TqunBS

Text21.Text = TquLBS

Text22.Text = TqunLBS



Text15.Text = TquLKN

Text16.Text = TqunLKN

Text17.Text = TquLLKN

Text18.Text = TqunLLKN

Text23.Text = TquPEM

Text24.Text = TqunPEM

Text25.Text = TquLPEM

Text26.Text = TqunLPEM

Text35.Text = TquM / Fk

Text36.Text = TquBS / Fk

Text37.Text = TquLKN / Fk

Text38.Text = TquPEM / Fk

Text27.Text = Nq

Text28.Text = Nc

Text29.Text = Ng

Exit Sub

eror:

MsgBox "Ada kesalahan dalam pengisian data anda", vbInformation, "Kesalahan dalam memasukkan data"

End Sub

Private Sub btn_baru_Click()

On Error GoTo eror

Adodc1.Recordset.AddNew



Adodc1.Recordset.Fields("id_proyek") = Text30.Text

Adodc1.Recordset.Fields("id_titik") = Text3.Text

Adodc1.Recordset.Fields("SG") = 0

Adodc1.Recordset.Fields("kohesi") = 0

Adodc1.Recordset.Fields("BVB") = 0

Adodc1.Recordset.Fields("BVJ") = 0

Adodc1.Recordset.Fields("MAT") = 0

Adodc2.Recordset.AddNew

Adodc2.Recordset.Fields("id_proyek") = Text30.Text

Adodc2.Recordset.Fields("id_titik") = Text3.Text

Adodc2.Recordset.Fields("kedalaman_p") = 0

Adodc2.Recordset.Fields("panjang_p") = 0

Adodc2.Recordset.Fields("lebar_p") = 0

'====

Check2.Enabled = True

Text13.Enabled = True

Text6.Enabled = True

Text7.Enabled = True

Text13.Enabled = True

Command1.Enabled = True

Text1.Enabled = True

Text2.Enabled = True

Text4.Enabled = True

Text5.Enabled = True

Exit Sub



error:

MsgBox Err.Description

End Sub

Private Sub btn_ganti_Click()

Text14.Enabled = True

Text31.Enabled = True

Text13.Enabled = True

Text6.Enabled = True

Text7.Enabled = True

Text13.Enabled = True

Command1.Enabled = True

Text1.Enabled = True

Text2.Enabled = True

Text4.Enabled = True

Text5.Enabled = True

End Sub

Private Sub btn_print_Click()

FrmPrintUjiLab.Show

FrmPrintUjiLab.CurrentX = 2200

FrmPrintUjiLab.CurrentY = 1000

FrmPrintUjiLab.FontSize = FormUjiLab.FontSize

FrmPrintUjiLab.Print FormUjiLab.Caption

FrmPrintUjiLab.CurrentX = 1000



```
FrmPrintUjiLab.Print "-----  
-----"
```

```
FrmPrintUjiLab.CurrentX = 2200
```

```
FrmPrintUjiLab.FontSize = 14
```

```
FrmPrintUjiLab.Print Label40.Caption
```

```
FrmPrintUjiLab.Print ""
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print Label53.Caption & vbTab & vbTab & Text3.Text
```

```
FrmPrintUjiLab.Print ""
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print Label7.Caption & vbTab & vbTab & Text6.Text & " (m)"
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print Label8.Caption & vbTab & vbTab & vbTab & vbTab &  
Text7.Text & " (m)"
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print Label4.Caption & vbTab & vbTab & Text13.Text & " (m)"
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```



```
FrmPrintUjiLab.Print Label2.Caption & vbTab & vbTab & vbTab & Text1.Text  
FrmPrintUjiLab.FontName = "arial"  
FrmPrintUjiLab.FontSize = 10  
FrmPrintUjiLab.CurrentX = 1000  
FrmPrintUjiLab.Print Label3.Caption & vbTab & vbTab & vbTab & vbTab &  
Text2.Text & " (t/m2)"  
FrmPrintUjiLab.FontName = "arial"  
FrmPrintUjiLab.FontSize = 10  
FrmPrintUjiLab.CurrentX = 1000  
FrmPrintUjiLab.Print Label5.Caption & vbTab & vbTab & Text4.Text & " (t/m3)"  
FrmPrintUjiLab.FontName = "arial"  
FrmPrintUjiLab.FontSize = 10  
FrmPrintUjiLab.CurrentX = 1000  
FrmPrintUjiLab.Print Label6.Caption & vbTab & vbTab & Text5.Text & " (t/m3)"  
FrmPrintUjiLab.FontName = "arial"  
FrmPrintUjiLab.FontSize = 10  
FrmPrintUjiLab.CurrentX = 1000  
FrmPrintUjiLab.Print "Faktor Keamanan :" & vbTab & vbTab & vbTab & Text34.Text  
FrmPrintUjiLab.FontName = "arial"  
FrmPrintUjiLab.FontSize = 10  
FrmPrintUjiLab.CurrentX = 1000  
FrmPrintUjiLab.Print "M.A.T (Dw) :" & vbTab & vbTab & vbTab & Text8.Text & "  
(m)"  
If Check3.Value = Checked Then  
FrmPrintUjiLab.FontName = "arial"  
FrmPrintUjiLab.FontSize = 10  
FrmPrintUjiLab.CurrentX = 1000
```



```
FrmPrintUjiLab.Print "Gamma efektif :" & vbTab & vbTab & vbTab & Text39.Text & "  
(t/m3)"
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print "Gamma rata-rata :" & vbTab & vbTab & vbTab & Text40.Text & "  
(t/m3)"
```

```
ElseIf Check3.Value = Unchecked Then
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print "Gamma efektif : - "
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print "Gamma rata-rata : - "
```

```
End If
```

```
If Check_memanjang.Value = Unchecked Then
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print "qu (Pondasi Memanjang) : - "
```

```
Else
```

```
FrmPrintUjiLab.FontName = "arial"
```

```
FrmPrintUjiLab.FontSize = 10
```

```
FrmPrintUjiLab.CurrentX = 1000
```

```
FrmPrintUjiLab.Print "qu (Pondasi Memanjang) :" & vbTab & Text9.Text & " (t/m2)"
```



End If

If Check_bujursangkar.Value = Unchecked Then

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qu (Pondasi Bujur-Sangkar) : - "

Else

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qu (Pondasi Bujur-Sangkar) : " & vbTab & Text19.Text & "
(t/m2)"

End If

If Check_lingkarannya.Value = Unchecked Then

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qu (Pondasi Lingkaran) : - "

Else

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qu (Pondasi Lingkaran) : " & vbTab & Text15.Text & " (t/m2)"

End If

If Check_PEM.Value = Unchecked Then

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

Razaqy Ashari Yasin (11.12.0021)

Setya Herbowo (11.12.0027)



```
FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qu (Pondasi Persegi-Empat-Memanjang) : - "

Else

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qu (Pondasi Persegi-Empat-Memanjang) : " & vbTab &
Text23.Text & " (t/m2)"

End If

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "-----"
--"

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "-----DAYA DUKUNG IJIN-----"
_"

If Check_memanjang.Value = Unchecked Then

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qa (Pondasi Memanjang) : - "

Else

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qa (Pondasi Memanjang) : " & vbTab & Text35.Text & " (t/m2)"

End If

If Check_bujursangkar.Value = Unchecked Then
```



```
FrmPrintUjiLab.FontName = "arial"  
  
FrmPrintUjiLab.FontSize = 10  
  
FrmPrintUjiLab.CurrentX = 1000  
  
FrmPrintUjiLab.Print "qa (Pondasi Bujur-Sangkar) : - "  
  
Else  
  
FrmPrintUjiLab.FontName = "arial"  
  
FrmPrintUjiLab.FontSize = 10  
  
FrmPrintUjiLab.CurrentX = 1000  
  
FrmPrintUjiLab.Print "qa (Pondasi Bujur-Sangkar) : " & vbCrLf & Text36.Text & "  
(t/m2)"  
  
End If  
  
If Check_lingkarán.Value = Unchecked Then  
  
FrmPrintUjiLab.FontName = "arial"  
  
FrmPrintUjiLab.FontSize = 10  
  
FrmPrintUjiLab.CurrentX = 1000  
  
FrmPrintUjiLab.Print "qa (Pondasi Lingkaran) : - "  
  
Else  
  
FrmPrintUjiLab.FontName = "arial"  
  
FrmPrintUjiLab.FontSize = 10  
  
FrmPrintUjiLab.CurrentX = 1000  
  
FrmPrintUjiLab.Print "qa (Pondasi Lingkaran) : " & vbCrLf & Text37.Text & " (t/m2)"  
  
End If  
  
If Check_PEM.Value = Unchecked Then  
  
FrmPrintUjiLab.FontName = "arial"  
  
FrmPrintUjiLab.FontSize = 10  
  
FrmPrintUjiLab.CurrentX = 1000  
  
FrmPrintUjiLab.Print "qa (Pondasi Persegi-Empat-Memanjang) : - "
```




Else

FrmPrintUjiLab.FontName = "arial"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "qa (Pondasi Persegi-Empat-Memanjang) :" & vbTab &
Text38.Text & " (t/m2)"

End If

FrmPrintUjiLab.CurrentX = 1000

FrmPrintUjiLab.Print "-----"
--"

FrmPrintUjiLab.CurrentX = 1200

FrmPrintUjiLab.FontName = "Comic Sans MS"

FrmPrintUjiLab.FontSize = 10

FrmPrintUjiLab.Print "printed at : " & Date

End Sub

Private Sub btn_simpan_Click()

Adodc1.Recordset.Update

Adodc2.Recordset.Update

MsgBox "Data sudah tersimpan", vbInformation, "Uji Laboratorium"

End Sub

Private Sub Check_bujursangkar_Click()

If Check_bujursangkar.Value = Checked Then

Text19.Visible = True

Text20.Visible = True

Text21.Visible = True



Text22.Visible = True

Text36.Visible = True

Label57.Visible = True

Label58.Visible = True

Label59.Visible = True

Label60.Visible = True

Label76.Visible = True

Label37.Visible = True

Label39.Visible = True

Label23.Visible = True

Label24.Visible = True

Label72.Visible = True

ElseIf Check_bujursangkar.Value = Unchecked Then

Text19.Visible = False

Text20.Visible = False

Text21.Visible = False

Text22.Visible = False

Text36.Visible = False

Label57.Visible = False

Label58.Visible = False

Label59.Visible = False

Label60.Visible = False

Label76.Visible = False

Label37.Visible = False

Label39.Visible = False



Label23.Visible = False

Label24.Visible = False

Label72.Visible = False

End If

End Sub

Private Sub Check_lingkaran_Click()

If Check_lingkaran.Value = Checked Then

Text15.Visible = True

Text16.Visible = True

Text17.Visible = True

Text18.Visible = True

Text37.Visible = True

Label61.Visible = True

Label62.Visible = True

Label63.Visible = True

Label64.Visible = True

Label77.Visible = True

Label45.Visible = True

Label46.Visible = True

Label47.Visible = True

Label48.Visible = True

Label73.Visible = True

ElseIf Check_lingkaran.Value = Unchecked Then

Text15.Visible = False

Text16.Visible = False



Text17.Visible = False

Text18.Visible = False

Text37.Visible = False

Label61.Visible = False

Label62.Visible = False

Label63.Visible = False

Label64.Visible = False

Label77.Visible = False

Label45.Visible = False

Label46.Visible = False

Label47.Visible = False

Label48.Visible = False

Label73.Visible = False

End If

End Sub

Private Sub Check_memanjang_Click()

If Check_memanjang.Value = Checked Then

Text9.Visible = True

Text10.Visible = True

Text11.Visible = True

Text12.Visible = True

Text35.Visible = True

Label41.Visible = True

Label42.Visible = True

Label51.Visible = True



Label52.Visible = True

Label75.Visible = True

Label19.Visible = True

Label20.Visible = True

Label21.Visible = True

Label22.Visible = True

Label71.Visible = True

ElseIf Check_memanjang.Value = Unchecked Then

Text9.Visible = False

Text10.Visible = False

Text11.Visible = False

Text12.Visible = False

Text35.Visible = False

Label41.Visible = False

Label42.Visible = False

Label51.Visible = False

Label52.Visible = False

Label75.Visible = False

Label19.Visible = False

Label20.Visible = False

Label21.Visible = False

Label22.Visible = False

Label71.Visible = False

End If

End Sub



Private Sub Check_PEM_Click()

If Check_PEM.Value = Checked Then

Text23.Visible = True

Text24.Visible = True

Text25.Visible = True

Text26.Visible = True

Text38.Visible = True

Label65.Visible = True

Label66.Visible = True

Label67.Visible = True

Label68.Visible = True

Label78.Visible = True

Label25.Visible = True

Label26.Visible = True

Label27.Visible = True

Label28.Visible = True

Label74.Visible = True

'==

Label8.Visible = True

Text7.Visible = True

Text7.Text = ""

Label14.Visible = True

ElseIf Check_PEM.Value = Unchecked Then

Text23.Visible = False

Text24.Visible = False

Text25.Visible = False



Text26.Visible = False

Text38.Visible = False

Label65.Visible = False

Label66.Visible = False

Label67.Visible = False

Label68.Visible = False

Label78.Visible = False

Label25.Visible = False

Label26.Visible = False

Label27.Visible = False

Label28.Visible = False

Label74.Visible = False

'==

Label8.Visible = False

Text7.Visible = False

Text7.Text = 1.329619

Label14.Visible = False

End If

End Sub

Private Sub Check2_Click()

If Check2.Value = Checked Then

Text31.Enabled = True

pic_lap2.Visible = True

ElseIf Check2.Value = Unchecked Then

Text31.Enabled = False



pic_lap2.Visible = False

End If

End Sub

Private Sub Check3_Click()

If Check3.Value = Checked Then

Text8.Visible = True

Label16.Visible = True

Label9.Visible = True

btn_analisaMAT.Visible = True

btn_analisa.Visible = False

Text39.Visible = True

Text40.Visible = True

Image5.Visible = True

Image6.Visible = True

ElseIf Check3.Value = Unchecked Then

Text8.Text = "0"

Text8.Visible = False

Label16.Visible = False

Label9.Visible = False

btn_analisa.Visible = True

btn_analisaMAT.Visible = False

Text39.Text = "0"

Text39.Visible = False

Text40.Text = "0"

Text40.Visible = False



Image5.Visible = False

Image6.Visible = False

End If

End Sub

Private Sub Combo1_Click()

If Combo1.Text = "Abu-abu" Then

pic_lap1.FillColor = &HC0C0C0

ElseIf Combo1.Text = "Merah" Then

pic_lap1.FillColor = &H8080FF

ElseIf Combo1.Text = "Hijau" Then

pic_lap1.FillColor = &H80FF80

ElseIf Combo1.Text = "Kuning" Then

pic_lap1.FillColor = &H80FFFF

ElseIf Combo1.Text = "Ungu" Then

pic_lap1.FillColor = &HFF80FF

ElseIf Combo1.Text = "Biru Muda" Then

pic_lap1.FillColor = &HFFFF80

End If

End Sub

Private Sub Combo2_Click()

If Combo2.Text = "Abu-abu" Then

pic_lap2.FillColor = &HC0C0C0

ElseIf Combo2.Text = "Merah" Then

pic_lap2.FillColor = &H8080FF



```
ElseIf Combo2.Text = "Hijau" Then  
pic_lap2.FillColor = &H80FF80  
ElseIf Combo2.Text = "Kuning" Then  
pic_lap2.FillColor = &H80FFFF  
ElseIf Combo2.Text = "Ungu" Then  
pic_lap2.FillColor = &HFF80FF  
ElseIf Combo2.Text = "Biru Muda" Then  
pic_lap2.FillColor = &HFFFF80  
End If  
End Sub
```

```
Private Sub Command1_Click()  
On Error GoTo eror  
Dim df As Single  
pic_pondasiA.Visible = True  
pic_pondasiB.Visible = True  
df = Text13.Text  
ab = df * 1200  
pondasiA = 255 + ab  
pondasiB = 3120 + ab  
pic_pondasiA.Height = pondasiA  
pic_pondasiB.Top = pondasiB  
'===tanah lap 1  
Dim delta1 As Single  
delta1 = Text32.Text  
ab1 = delta1 * 1203.75
```



```
pic_lap1.Height = 0 + ab1  
Label69.Visible = True  
Label69.Caption = Text14.Text  
Label69.Top = ab1 - 800  
'====tanah lap 2  
Dim delta2 As Single  
delta2 = Text33.Text  
ab2 = delta2 * 1203.75  
pic_lap2.Height = 0 + ab2  
Label70.Visible = True  
Label70.Caption = Text31.Text  
Label70.Top = ab2 - 800  
If Text33.Text <= Text32.Text Then  
MsgBox "Nilai tanah lapisan 2 tidak boleh kurang dari sebelumnya", vbExclamation,  
"Kesalahan memasukkan DATA !"  
End If  
'=====  
If df < Text32.Text Then  
Label38.Caption = "Pondasi berada di tanah lapisan 1. "  
ElseIf df = Text32.Text Then  
Label38.Caption = "Pondasi berada tepat di permukaan tanah lapisan 2. "  
ElseIf df > Text32.Text Then  
Label38.Caption = "Pondasi berada di tanah lapisan 2. "  
End If  
Exit Sub  
error:
```



MsgBox "Untuk menampilkan posisi pondasi, pengisian kedalaman lapisan tanah harus angka numerik!", vbExclamation, "ADA KESALAHAN!"

End Sub

Private Sub Command2_Click()

Form1.Enabled = True

Unload Me

End Sub

Private Sub btn_analisaMAT_Click()

On Error GoTo eror

'simbol

SG = Text1.Text

c = Text2.Text

df = Text13.Text

BVB = Text4.Text

BVJ = Text5.Text

B = Text6.Text

L = Text7.Text

Dw = Text8.Text

Fk = Text34.Text

Z = Dw - df

'-----

'mencair nilai Nq

e = 2.718281828

N1 = (45 + (SG / 2))

N2 = 2 * Math.Cos(N1 * (22 / 7) / 180) ^ 2

Razaqy Ashari Yasin (11.12.0021)

Setya Herbowo (11.12.0027)



$$N3 = \text{Math.Tan}(SG * (22 / 7) / 180)$$

$$N4 = e ^ (2 * (22 / 7) * (0.75 - (SG / 360))) * N3$$

$$N5 = 2 * \text{Math.Cos}(N1 * (22 / 7) / 180) ^ 2$$

$$Nq = N4 / N5$$

'mencari nilai Nc

$$Nc = (Nq - 1) / N3$$

'mencari nilai Ng

$$Ng = (2 * (Nq + 1) * \text{Math.Tan}(SG * (22 / 7) / 180)) / (1 + 0.4 * \text{Math.Sin}(4 * SG * (22 / 7) / 180))$$

'Keruntuhan geser lokal

'mencair nilai Nq'

$$e = 2.718281828$$

$$c1 = (2 / 3) * c$$

$$sg1 = \text{Math.Atn}((2 / 3) * (\text{Math.Tan}(SG * (22 / 7) / 180))) * 180 / (22 / 7)$$

$$NL1 = (45 + (sg1 / 2))$$

$$NL2 = 2 * \text{Math.Cos}(NL1 * (22 / 7) / 180) ^ 2$$

$$NL3 = \text{Math.Tan}(sg1 * (22 / 7) / 180)$$

$$NL4 = e ^ (2 * (22 / 7) * (0.75 - (sg1 / 360))) * NL3$$

$$NL5 = 2 * \text{Math.Cos}(NL1 * (22 / 7) / 180) ^ 2$$

$$NqL = NL4 / NL5$$

'mencari nilai Nc'

$$NcL = (NqL - 1) / NL3$$

'mencari nilai Ng'

$$NgL = (2 * (NqL + 1) * \text{Math.Tan}(sg1 * (22 / 7) / 180)) / (1 + 0.4 * \text{Math.Sin}(4 * sg1 * (22 / 7) / 180))$$



'nilai Dw (muka air tanah)

'Dw diatas Df

$$po1 = ((BVJ - 1) * (df - Dw)) + (Dw * BVB)$$

'Dw = Df

$$po2 = df * BVB$$

'Dw dibawah Df (dengan syarat z lebih dari B atau jarak antara muka air tanah terhadap kedalaman pondasi)

$$Grt = (BVJ - 1) + (Z / B) * (BVB - (BVJ - 1))$$

$$g1 = BVJ - 1$$

Text39.Text = g1

'jika muka air tanah terletak pada kedalaman z di bawah dasar pondasi ($z < B$), gamma yang digunakan adalah

If $Z \leq B$ Then

'digunakan gamma rata-rata

$$gbwh = (BVJ - 1) + (Z / B) * (BVB - (BVJ - 1))$$

Text40.Text = gbwh

End If

'Dw di atas Df

'PONDASI memanjang (homogen)

'keruntuhan geser umum

'mencari nilai qu:

$$AquM = (c * Nc) + (po1 * Nq) + (0.5 * g1 * B * Ng)$$

'mencari nilai qun:

$$AqunM = (c * Nc) + (po1 * (Nq - 1)) + (0.5 * g1 * B * Ng)$$



'keruntuhan geser lokal

'mencari nilai qu':

$$AquLM = (c1 * NcL) + (po1 * NqL) + (0.5 * g1 * B * NgL)$$

'mencari nilai qun':

$$AqunLM = (c1 * NcL) + (po1 * (NqL - 1)) + (0.5 * g1 * B * NgL)$$

'PONDASI BUJUR-SANGKAR(homogen)

'keruntuhan geser umum

'qu :

$$AquBS = (1.3 * c * Nc) + (po1 * Nq) + (0.4 * g1 * B * Ng)$$

'qun :

$$AqunBS = (1.3 * c * Nc) + (po1 * (Nq - 1)) + (0.4 * g1 * B * Ng)$$

'keruntuhan geser lokal

'qu':

$$AquLBS = (1.3 * c1 * NcL) + (po1 * NqL) + (0.4 * g1 * B * NgL)$$

'qun':

$$AqunLBS = (1.3 * c1 * NcL) + (po1 * (NqL - 1)) + (0.4 * g1 * B * NgL)$$

'PONDASI PERSEGI EMPAT MEMANJANG (homogen)

'Keruntuhan geser umum

'qu:

$$AquPEM = (c * Nc * (1 + 0.3 * (B / L))) + (po1 * Nq) + (0.5 * g1 * B * Ng * (1 - 0.2 * (B / L)))$$

'qun:



$$AqunPEM = (c * Nc * (1 + 0.3 * (B / L))) + (po1 * (Nq - 1)) + (0.5 * g1 * B * Ng * (1 - 0.2 * (B / L)))$$

'Keruntuhan geser lokal

'qu':

$$AqunLPEM = (c1 * NcL * (1 + 0.3 * (B / L))) + (po1 * NqL) + (0.5 * g1 * B * NgL * (1 - 0.2 * (B / L)))$$

'qun':

$$AqunLPEM = (c1 * NcL * (1 + 0.3 * (B / L))) + (po1 * (NqL - 1)) + (0.5 * g1 * B * NgL * (1 - 0.2 * (B / L)))$$

'-----

'PONDASI LINGKARAN (homogen)

'Keruntuhan geser umum

'qu:

$$AqunLKN = (1.3 * c * Nc) + (po1 * Nq) + (0.3 * g1 * B * Ng)$$

'qun:

$$AqunLKN = (1.3 * c * Nc) + (po1 * (Nq - 1)) + (0.3 * g1 * B * Ng)$$

'Keruntuhan geser lokal

'qu':

$$AqunLLKN = (1.3 * c1 * NcL) + (po1 * NqL) + (0.3 * g1 * B * NgL)$$

'qun':

$$AqunLLKN = (1.3 * c1 * NcL) + (po1 * (NqL - 1)) + (0.3 * g1 * B * NgL)$$

'-----

'Dw di bawah Df

'-----

'PONDASI MEMANJANG



'keruntuhan geser umum

'qu:

$$BquM = (c * Nc) + (po2 * Nq) + (0.5 * gbwh * B * Ng)$$

'qun:

$$BqunM = (c * Nc) + (po2 * (Nq - 1)) + (0.5 * gbwh * B * Ng)$$

'Keruntuhan geser lokal

'qu':

$$BquLM = (c1 * NcL) + (po2 * NqL) + (0.5 * gbwh * B * NgL)$$

'qun':

$$BqunLM = (c1 * NcL) + (po2 * (NqL - 1)) + (0.5 * gbwh * B * NgL)$$

'PONDASI BUJUR-SANGKAR-----

-

'Keruntuhan geser umum

'qu:

$$BquBS = (1.3 * c * Nc) + (po2 * Nq) + (0.4 * gbwh * B * Ng)$$

'qun :

$$BqunBS = (1.3 * c * Nc) + (po2 * (Nq - 1)) + (0.4 * gbwh * B * Ng)$$

'Keruntuhan geser lokal

'qu':

$$BquLBS = (1.3 * c1 * NcL) + (po2 * NqL) + (0.4 * gbwh * B * NgL)$$

'qun':

$$BqunLBS = (1.3 * c1 * NcL) + (po2 * (NqL - 1)) + (0.4 * gbwh * B * NgL)$$

'PONDASI PERSEGI EMPAT MEMANJANG-----

'Keruntuhan geser umum



'qu:

$$BquPEM = (c * Nc * (1 + 0.3 * (B / L))) + (po2 * Nq) + (0.5 * gbwh * B * Ng * (1 - 0.2 * (B / L)))$$

'qun:

$$BqunPEM = (c * Nc * (1 + 0.3 * (B / L))) + (po2 * (Nq - 1)) + (0.5 * gbwh * B * Ng * (1 - 0.2 * (B / L)))$$

'Keruntuhan geser lokal

'qu':

$$BquLPEM = (c1 * NcL * (1 + 0.3 * (B / L))) + (po2 * NqL) + (0.5 * gbwh * B * NgL * (1 - 0.2 * (B / L)))$$

'qun':

$$BqunLPEM = (c1 * NcL * (1 + 0.3 * (B / L))) + (po2 * (NqL - 1)) + (0.5 * gbwh * B * NgL * (1 - 0.2 * (B / L)))$$

'PONDASI LINGKARAN-----

'Keruntuhan geser umum

'qu:

$$BquLKN = (1.3 * c * Nc) + (po2 * Nq) + (0.3 * gbwh * B * Ng)$$

'qun:

$$BqunLKN = (1.3 * c * Nc) + (po2 * (Nq - 1)) + (0.3 * gbwh * B * Ng)$$

'Keruntuhan geser lokal

'qu':

$$BquLLKN = (1.3 * c1 * NcL) + (po2 * NqL) + (0.3 * gbwh * B * NgL)$$

'qun':

$$BqunLLKN = (1.3 * c1 * NcL) + (po2 * (NqL - 1)) + (0.3 * gbwh * B * NgL)$$

'-----

'Dw tepat pada posisi / sama Df



PONDASI MEMANJANG

'keruntuhan geser umum

'qu:

$$T_{quM} = (c * N_c) + (p_{o2} * N_q) + (0.5 * g_1 * B * N_g)$$

'qun:

$$T_{qunM} = (c * N_c) + (p_{o2} * (N_q - 1)) + (0.5 * g_1 * B * N_g)$$

'Keruntuhan geser lokal

'qu':

$$T_{quLM} = (c_1 * N_{cL}) + (p_{o2} * N_{qL}) + (0.5 * g_1 * B * N_{gL})$$

'qun':

$$T_{qunLM} = (c_1 * N_{cL}) + (p_{o2} * (N_{qL} - 1)) + (0.5 * g_1 * B * N_{gL})$$

PONDASI BUJUR-SANGKAR

-

'Keruntuhan geser umum

'qu:

$$T_{quBS} = (1.3 * c * N_c) + (p_{o2} * N_q) + (0.4 * g_1 * B * N_g)$$

'qun :

$$T_{qunBS} = (1.3 * c * N_c) + (p_{o2} * (N_q - 1)) + (0.4 * g_1 * B * N_g)$$

'Keruntuhan geser lokal

'qu':

$$T_{quLBS} = (1.3 * c_1 * N_{cL}) + (p_{o2} * N_{qL}) + (0.4 * g_1 * B * N_{gL})$$

'qun':

$$T_{qunLBS} = (1.3 * c_1 * N_{cL}) + (p_{o2} * (N_{qL} - 1)) + (0.4 * g_1 * B * N_{gL})$$



'PONDASI PERSEGI EMPAT MEMANJANG-----

'Keruntuhan geser umum

'qu:

$$T_{quPEM} = (c * N_c * (1 + 0.3 * (B / L))) + (p_{o2} * N_q) + (0.5 * g_1 * B * N_g * (1 - 0.2 * (B / L)))$$

'qun:

$$T_{qunPEM} = (c * N_c * (1 + 0.3 * (B / L))) + (p_{o2} * (N_q - 1)) + (0.5 * g_1 * B * N_g * (1 - 0.2 * (B / L)))$$

'Keruntuhan geser lokal

'qu':

$$T_{quLPEM} = (c_1 * N_{cL} * (1 + 0.3 * (B / L))) + (p_{o2} * N_{qL}) + (0.5 * g_1 * B * N_{gL} * (1 - 0.2 * (B / L)))$$

'qun':

$$T_{qunLPEM} = (c_1 * N_{cL} * (1 + 0.3 * (B / L))) + (p_{o2} * (N_{qL} - 1)) + (0.5 * g_1 * B * N_{gL} * (1 - 0.2 * (B / L)))$$

'PONDASI LINGKARAN-----

'Keruntuhan geser umum

'qu:

$$T_{quLKN} = (1.3 * c * N_c) + (p_{o2} * N_q) + (0.3 * g_1 * B * N_g)$$

'qun:

$$T_{qunLKN} = (1.3 * c * N_c) + (p_{o2} * (N_q - 1)) + (0.3 * g_1 * B * N_g)$$

'Keruntuhan geser lokal

'qu':

$$T_{quLLKN} = (1.3 * c_1 * N_{cL}) + (p_{o2} * N_{qL}) + (0.3 * g_1 * B * N_{gL})$$



'qun':

$$T_{qunLLKN} = (1.3 * c_1 * N_{cL}) + (p_{o2} * (N_{qL} - 1)) + (0.3 * g_1 * B * N_{gL})$$

If $D_w < d_f$ Then

Label18.Caption = "Dw berada di atas Df"

Text9.Text = AquM

Text10.Text = AquN_M

Text11.Text = AquLM

Text12.Text = AquN_{LM}

Text35.Text = AquM / Fk

Text19.Text = AquBS

Text20.Text = AquN_{BS}

Text21.Text = AquLBS

Text22.Text = AquN_{LBS}

Text36.Text = AquBS / Fk

Text15.Text = AquLKN

Text16.Text = AquN_{LKN}

Text17.Text = AquLLKN

Text18.Text = AquN_{LLKN}

Text37.Text = AquLKN / Fk

Text23.Text = AquPEM

Text24.Text = AquN_{PEM}



Text25.Text = AquLPEM

Text26.Text = AquLPEM

Text38.Text = AquPEM / Fk

MsgBox "Beban maksimum persatuan luas tanah dapat menopang beban (Pondasi Memanjang)" & Chr(10) & "qu : " & Text9.Text & Chr(10) & " qun : " & Text10.Text & Chr(10) & "qu' : " & Text11.Text & Chr(10) & "qun' : " & Text12.Text & Chr(10) & "Apakah benar hasil beban maksimum tersebut?", vbYesNo + vbInformation, "Hasil qu, Dw berada di atas Df"

End If

If Dw = df Then

Label18.Caption = "Dw berada tepat atau sama dengan Df"

Text9.Text = TquM

Text10.Text = TqunM

Text11.Text = TquLM

Text12.Text = TqunLM

Text19.Text = TquBS

Text20.Text = TqunBS

Text21.Text = TquLBS

Text22.Text = TqunLBS

Text15.Text = TquLKN

Text16.Text = TqunLKN

Text17.Text = TquLLKN



Text18.Text = TqunLLKN

Text23.Text = TquPEM

Text24.Text = TqunPEM

Text25.Text = TquLPEM

Text26.Text = TqunLPEM

Text35.Text = TquM / Fk

Text36.Text = TquBS / Fk

Text37.Text = TquLKN / Fk

Text38.Text = TquPEM / Fk

MsgBox "Beban maksimum persatuan luas tanah dapat menopang beban (Pondasi Memanjang)" & Chr(10) & "qu : " & Text9.Text & Chr(10) & " qun : " & Text10.Text & Chr(10) & "qu' : " & Text11.Text & Chr(10) & "qun' : " & Text12.Text & Chr(10) & "Apakah benar hasil beban maksimum tersebut?", vbYesNo + vbInformation, "Hasil qu, Dw berada tepat atau sama dengan Df"

End If

If Dw > df Then

Label18.Caption = "Dw berada di bawah Df"

Text9.Text = BquM

Text10.Text = BqunM

Text11.Text = BquLM

Text12.Text = BqunLM

Text19.Text = BquBS

Text20.Text = BqunBS

Text21.Text = BquLBS



Text22.Text = BqunLBS

Text15.Text = BquLKN

Text16.Text = BqunLKN

Text17.Text = BquLLKN

Text18.Text = BqunLLKN

Text23.Text = BquPEM

Text24.Text = BqunPEM

Text25.Text = BquLPEM

Text26.Text = BqunLPEM

Text35.Text = BquM / Fk

Text36.Text = BquBS / Fk

Text37.Text = BquLKN / Fk

Text38.Text = BquPEM / Fk

MsgBox "Beban maksimum persatuan luas tanah dapat menopang beban (Pondasi Memanjang)" & Chr(10) & "qu : " & Text9.Text & Chr(10) & " qun : " & Text10.Text & Chr(10) & "qu' : " & Text11.Text & Chr(10) & "qun' : " & Text12.Text & Chr(10) & "Apakah benar hasil beban maksimum tersebut?", vbYesNo + vbInformation, "Hasil qu, Dw berada di bawah Df"

End If

Text27.Text = Nq

Text28.Text = Nc

Text29.Text = Ng

'=====

Picture1.Refresh

X1 = 0



Y1 = Text8.Text

X2 = 6300

Y2 = Text8.Text

Picture1.Line (X1, Y1 * 1203.8)-(X2, Y2 * 1203.8), vbBlue

Exit Sub

error:

MsgBox "Ada kesalahan dalam pengisian data anda", vbInformation, "Kesalahan dalam memasukkan data"

End Sub

Private Sub Command3_Click()

If Command3.Caption = "Ganti Kode" Then

Command3.Caption = "OK"

Text3.Enabled = True

Else

Adodc1.Recordset.Filter = "id_titik =" & Text3.Text & "" AND id_proyek =" & Text30.Text & ""

Adodc2.Recordset.Filter = "id_titik =" & Text3.Text & "" AND id_proyek =" & Text30.Text & ""

Text3.Enabled = False

Command3.Caption = "Ganti Kode"

End If

End Sub

Private Sub Command4_Click()



FrmEdit.Show

End Sub

Private Sub Form_Load()

Call koneksi

Text30.Text = Form1.Text6.Text

Label40.Caption = Form1.Text1.Text

Adodc1.Recordset.Filter = "id_titik =" & Text3.Text & "' AND id_proyek =" &
Text30.Text & "' "

Adodc2.Recordset.Filter = "id_titik =" & Text3.Text & "' AND id_proyek =" &
Text30.Text & "' "

Combo1.AddItem "Abu-abu"

Combo1.AddItem "Merah"

Combo1.AddItem "Hijau"

Combo1.AddItem "Kuning"

Combo1.AddItem "Ungu"

Combo1.AddItem "Biru Muda"

Combo2.AddItem "Abu-abu"

Combo2.AddItem "Merah"

Combo2.AddItem "Hijau"

Combo2.AddItem "Kuning"

Combo2.AddItem "Ungu"

Combo2.AddItem "Biru Muda"

End Sub



Lampiran 3

Kode List Program UJI CPT

Dim db As ADODB.Connection

Dim rs As ADODB.Recordset

Dim SkalaX, SkalaY As Integer

Sub koneksi()

Set db = New ADODB.Connection

db.CursorLocation = adUseClient

db.Open "projek_ta"

End Sub

Sub kolom()

DataGrid1.Columns(0).Caption = "Kedalaman (m)"

DataGrid1.Columns(0).Width = "1500"

DataGrid1.Columns(1).Caption = "Conus (kg/cm²)"

DataGrid1.Columns(1).Width = "1500"

DataGrid1.Columns(2).Caption = "Conus + Cleeve (kg/cm²)"

DataGrid1.Columns(2).Width = "2000"

DataGrid1.Columns(3).Caption = "Keterangan Tanah"

DataGrid1.Columns(3).Width = "2000"

End Sub

Private Sub btn_baru_Click()



```
Adodc2.Recordset.AddNew

Adodc2.Recordset.Fields("id_proyek") = Text3.Text

Adodc2.Recordset.Fields("id_titik") = Text1.Text

Adodc2.Recordset.Fields("kedalaman_p") = 0

Adodc2.Recordset.Fields("panjang_p") = 0

Adodc2.Recordset.Fields("lebar_p") = 0

Adodc2.Recordset.Fields("kedalaman_maks") = 0

Adodc2.Recordset.Fields("kedalaman_interval") = 0.2

Combo1.Enabled = True

Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

End Sub

Private Sub btn_hapus_Click()

Dim sql As String

Dim pesan As Integer

pesan = MsgBox("Anda yakin menghapus data tersebut?", vbInformation + vbYesNo,
"Hapus Data !")

If pesan = vbYes Then

On Error Resume Next

sql = "DELETE FROM tabel_cpt WHERE id_titik =" & Text1.Text & " AND id_proyek
=" & Text3.Text & " "

db.Execute (sql)

Adodc2.Recordset.Delete

Combo1.Text = ""

Combo14.Text = ""
```



Text5.Text = ""

Combo4.Text = ""

End If

Call tampilan

Call kolom

End Sub

Private Sub btn_kembali_Click()

Form1.Enabled = True

Unload Me

End Sub

Private Sub btn_OK2_Click()

Dim sql As String

If Text9.Text < Text6.Text Then

MsgBox "Nilai tidak boleh kurang dari sebelumnya", vbExclamation, "Kesalahan"

Else

Set rs = New Recordset

sql = "UPDATE tabel_cpt SET ket_tanah = " & Text4.Text & " WHERE id_titik = " &
Text1.Text & " AND id_proyek = " & Text3.Text & " AND Kedalaman >=" &
Text6.Text & " AND Kedalaman <=" & Text9.Text & " "

Set rs = db.Execute(sql)

Set DataGrid1.DataSource = rs

Adodc1.Refresh

Set DataGrid1.DataSource = Adodc1

Adodc1.Recordset.Filter = "id_titik = " & Text1.Text & " AND id_proyek = " &
Text3.Text & " "



```
Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & "' AND id_proyek =" &  
Text3.Text & "' "
```

```
End If
```

```
Call tampilan
```

```
Call kolom
```

```
End Sub
```

```
Private Sub btn_print_Click()
```

```
Dim sql As String
```

```
FrmPrintCPT.Show
```

```
FrmPrintCPT.CurrentX = 2200
```

```
FrmPrintCPT.CurrentY = 400
```

```
FrmPrintCPT.FontSize = FormUjiCPT.FontSize
```

```
FrmPrintCPT.Print FormUjiCPT.Caption
```

```
FrmPrintCPT.CurrentX = 1000
```

```
FrmPrintCPT.Print "-----"  
-----"
```

```
FrmPrintCPT.CurrentX = 2200
```

```
FrmPrintCPT.FontSize = 14
```

```
FrmPrintCPT.Print Label24.Caption
```

```
FrmPrintCPT.Print ""
```

```
FrmPrintCPT.FontName = "arial"
```

```
FrmPrintCPT.FontSize = 10
```

```
FrmPrintCPT.CurrentX = 1000
```

```
FrmPrintCPT.Print Label1.Caption & vbTab & vbTab & Text1.Text
```

```
FrmPrintCPT.FontName = "arial"
```

```
FrmPrintCPT.FontSize = 10
```



```
FrmPrintCPT.CurrentX = 1000

FrmPrintCPT.Print Label25.Caption & vbTab & vbTab & Combo1.Text & " (m)"

FrmPrintCPT.FontName = "arial"

FrmPrintCPT.FontSize = 10

FrmPrintCPT.CurrentX = 1000

FrmPrintCPT.Print Label27.Caption & vbTab & vbTab & vbTab & Combo14.Text & "
(m)"

FrmPrintCPT.FontName = "arial"

FrmPrintCPT.FontSize = 10

FrmPrintCPT.CurrentX = 1000

FrmPrintCPT.Print Label29.Caption & vbTab & vbTab & Text5.Text & " (m)"

FrmPrintCPT.FontName = "arial"

FrmPrintCPT.FontSize = 10

FrmPrintCPT.CurrentX = 1000

FrmPrintCPT.Print Label28.Caption & vbTab & vbTab & vbTab & Combo4.Text & "
(m)"

FrmPrintCPT.FontName = "arial"

FrmPrintCPT.FontSize = 10

FrmPrintCPT.CurrentX = 1000

FrmPrintCPT.Print "Daya Dukung (qa):" & vbTab & vbTab & Text8.Text & " (kg/cm2)"

FrmPrintCPT.Print ""

FrmPrintCPT.CurrentX = 1600

FrmPrintCPT.Print "Kedalaman (m)" & vbTab & "Conus (kg/cm2)"

,

Set rs = New ADODB.Recordset

sql = "SELECT Kedalaman, Conus FROM tabel_cpt WHERE id_titik =" & Text1.Text
& "" AND id_proyek =" & Text3.Text & """
```



```
rs.Open (sql), db, adOpenDynamic, adLockOptimistic
```

```
Do Until rs.EOF
```

```
    Debug.Print rs.Fields("Conus").Value
```

```
    X1 = rs.Fields("Kedalaman").Value
```

```
    Y1 = rs.Fields("Conus").Value
```

```
    rs.MoveNext
```

```
FrmPrintCPT.CurrentX = 2200
```

```
FrmPrintCPT.Print X1 & vbTab & vbTab & vbTab & Y1
```

```
Loop
```

```
FrmPrintCPT.CurrentX = 1000
```

```
FrmPrintCPT.Print "-----"
```

```
FrmPrintCPT.CurrentX = 1200
```

```
FrmPrintCPT.FontName = "Comic Sans MS"
```

```
FrmPrintCPT.FontSize = 10
```

```
FrmPrintCPT.Print "printed at : " & Date
```

```
End Sub
```

```
Private Sub Check1_Click()
```

```
    If Check1.Value = Checked Then
```

```
        Combo4.Text = 0
```

```
        Combo4.Visible = False
```

```
    Else
```

```
        Combo4.Text = ""
```

```
        Combo4.Visible = True
```

```
    End If
```




End Sub

Private Sub Combo1_Click()

Text2.Text = 0

btn_edit.Enabled = True

btn_OK.Enabled = True

End Sub

Private Sub Command1_Click()

If Command1.Caption = "Ganti kode" Then

Command1.Caption = "OK"

Text1.Enabled = True

Else

Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

Text1.Enabled = False

Call tampilan

Call kolom

Command1.Caption = "Ganti kode"

End If

End Sub



```
Private Sub btn_edit_Click()  
If btn_edit.Caption = "Edit Data" Then  
    btn_edit.Caption = "Simpan"  
    DataGrid1.AllowUpdate = True  
    btn_hapus.Enabled = True  
Else  
    On Error Resume Next  
    Adodc1.Recordset.Update  
    Adodc2.Recordset.Update  
    btn_hapus.Enabled = False  
    DataGrid1.AllowUpdate = False  
    btn_edit.Caption = "Edit Data"  
    MsgBox "Data telah diperbaharui", vbInformation, "Data CPT"  
End If  
  
End Sub  
  
Private Sub btn_OK_Click()  
    Dim awal As Integer  
    Dim akhir As Integer  
    awal = Text2.Text  
  
    Do While Text2.Text <= Combo1.Text  
        Adodc1.Recordset.AddNew  
        Adodc1.Recordset.Fields("id_proyek") = Text3.Text  
        Adodc1.Recordset.Fields("id_titik") = Text1.Text
```



```
Adodc1.Recordset.Fields("Kedalaman") = Text2.Text
```

```
Adodc1.Recordset.Fields("Conus") = 0
```

```
Adodc1.Recordset.Fields("ConusCleeve") = 0
```

```
Adodc1.Recordset.Fields("ket_tanah") = None
```

```
Text2.Text = Text2.Text + 0.2
```

```
Loop
```

```
Set DataGrid1.DataSource = Adodc1.Recordset
```

```
Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & "" AND id_proyek =" &  
Text3.Text & "" "
```

```
Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & "" AND id_proyek =" &  
Text3.Text & "" "
```

```
Call tampilan
```

```
Call kolom
```

```
End Sub
```

```
Private Sub btn_analisa_Click()
```

```
Dim sql As String
```

```
Dim B As Single
```

```
Dim qa As Single
```

```
Dim az1, az2 As Currency
```

```
Call koneksi
```

```
On Error GoTo eror
```

```
az1 = Text5.Text
```

```
az2 = Combo4.Text
```

```
If Combo4.Text = "" Then
```



MsgBox "Lebar (B) tidak boleh kosong", vbExclamation, "Kesalahan"

Else

Combo3.Text = az1 + az2

Set rs = New Recordset

sql = "SELECT AVG(Conus) FROM tabel_cpt WHERE id_titik ='" & Text1.Text & "'
AND id_proyek ='" & Text3.Text & "' AND Kedalaman >='" & Text5.Text & "' AND
Kedalaman <='" & Combo3.Text & "' "

Set rs = db.Execute(sql)

Text7.Text = rs.Fields("AVG(Conus)")

qc = Text7.Text

B = Combo4.Text

If B <= 1.2 Then

'Pondasi bujur sangkar atau memanjang, B <= 1,2 m

qa1 = qc / 30

Text8.Text = qa1

ElseIf B > 1.2 Then

'Pondasi bujur sangkar atau memanjang, B > 1,2 m

qa2 = (qc / 50) * (1 + (0.3 / B)) ^ 2

Text8.Text = qa2

ElseIf B = 0 Then

'Daya dukung diijinkan secara pendekatan untuk seluruh pondasi dengan mengabaikan lebarnya

qa3 = qc / 40



```
Text8.Text = qa3
```

```
End If
```

```
End If
```

```
Exit Sub
```

```
error:
```

```
MsgBox "Ada kesalahan dalam pengisian data, periksa kembali data anda",  
vbExclamation, "Kesalahan"
```

```
End Sub
```

```
Private Sub Command5_Click()
```

```
On Error GoTo error
```

```
Dim sql As String
```

```
Set rs = New Recordset
```

```
sql = "SELECT AVG(Conus) FROM tabel_cpt WHERE kode_cpt ='" & Combo14.Text  
& "' AND Kedalaman >='" & Text5.Text & "' AND Kedalaman <='" & Combo3.Text &  
"'"
```

```
Set rs = db.Execute(sql)
```

```
Text7.Text = rs.Fields("AVG(Conus)")
```

```
Exit Sub
```

```
error:
```

```
MsgBox Err.Description
```

```
End Sub
```

```
Private Sub tampilan()
```

```
Dim sql As String
```

```
Set rs = New ADODB.Recordset
```



```
sql = "SELECT Kedalaman, Conus, ConusCleeve, ket_tanah FROM tabel_cpt WHERE  
id_titik ='" & Text1.Text & "' AND id_proyek ='" & Text3.Text & "' "
```

```
rs.Open sql, db, adOpenDynamic, adLockOptimistic
```

```
Set DataGrid1.DataSource = rs
```

```
End Sub
```

```
Private Sub Command6_Click()
```

```
On Error GoTo eror
```

```
pic_pondasiA.Visible = True
```

```
pic_pondasiB.Visible = True
```

```
Dim delta As Single
```

```
B = Combo4.Text
```

```
delta = Text5.Text
```

```
ab = delta * 1200
```

```
pondasiA = 375 + ab
```

```
pondasiB = 480 + ab
```

```
pic_pondasiA.Height = pondasiA
```

```
pic_pondasiB.Top = pondasiB
```

```
Shape3.Height = 0 + B * SkalaY
```

```
Shape3.Top = delta * SkalaY
```

```
'=====
```

```
Picture1.Refresh
```

```
Set rs = New ADODB.Recordset
```



```
sql = "SELECT Kedalaman, Conus FROM tabel_cpt WHERE id_titik =" & Text1.Text  
& " AND id_proyek =" & Text3.Text & ""
```

```
rs.Open (sql), db, adOpenDynamic, adLockOptimistic
```

```
rs.MoveFirst
```

```
Do Until rs.EOF
```

```
    X1 = rs.Fields("Conus").Value
```

```
    Y1 = rs.Fields("Kedalaman").Value
```

```
rs.MoveNext
```

```
If rs.EOF = False Then
```

```
    X2 = rs.Fields("Conus").Value
```

```
    Y2 = rs.Fields("Kedalaman").Value
```

```
End If
```

```
Picture1.Line (X1 * SkalaX, Y1 * SkalaY)-(X2 * SkalaX, Y2 * SkalaY), vbRed
```

```
Loop
```

```
'=====
```

```
Exit Sub
```

```
error: MsgBox Err.Description
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
Text3.Text = Form1.Text6.Text
```

```
Label24.Caption = Form1.Text1.Text
```



Call koneksi

Call tampilan

Call kolom

```
Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & "" AND id_proyek =" &  
Text3.Text & "" "
```

```
Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & "" AND id_proyek =" &  
Text3.Text & "" "
```

```
Combo1.AddItem "0.2"
```

```
Combo1.AddItem "0.4"
```

```
Combo1.AddItem "0.6"
```

```
Combo1.AddItem "0.8"
```

```
Combo1.AddItem "1.0"
```

```
Combo1.AddItem "1.2"
```

```
Combo1.AddItem "1.4"
```

```
Combo1.AddItem "1.6"
```

```
Combo1.AddItem "1.8"
```

```
Combo1.AddItem "2.0"
```

```
Combo1.AddItem "2.2"
```

```
Combo1.AddItem "2.4"
```

```
Combo1.AddItem "2.6"
```

```
Combo1.AddItem "2.8"
```

```
Combo1.AddItem "3.0"
```

```
Combo1.AddItem "3.2"
```

```
Combo1.AddItem "3.4"
```

```
Combo1.AddItem "3.6"
```




Combo1.AddItem "3.8"

Combo1.AddItem "4.0"

'nilai skala dalama menggambar pada VB

SkalaX = 30.3125

SkalaY = 1200

'Titik acuan sumbu Y, sebagai titik nol sumbu Y

End Sub







Lampiran 4

Kode List Program UJI SPT

Dim db As ADODB.Connection

Dim rs As ADODB.Recordset

Dim sql As String

Dim SkalaX, SkalaY As Integer

Sub koneksi()

Set db = New ADODB.Connection

db.CursorLocation = adUseClient

db.Open "projek_ta"

End Sub

Sub kolom()

DataGrid1.Columns(0).Caption = "Kedalaman (m)"

DataGrid1.Columns(0).Width = "1300"

DataGrid1.Columns(1).Caption = "N1"

DataGrid1.Columns(1).Width = "500"

DataGrid1.Columns(2).Caption = "N2"

DataGrid1.Columns(2).Width = "500"

DataGrid1.Columns(3).Caption = "N3"

DataGrid1.Columns(3).Width = "500"

DataGrid1.Columns(4).Caption = "N spt (N2+N3)"

DataGrid1.Columns(4).Width = "1500"

DataGrid1.Columns(5).Caption = "Keterangan Tanah"



```
DataGrid1.Columns(5).Width = "2000"
```

```
End Sub
```

```
Private Sub tampilan()
```

```
Set rs = New ADODB.Recordset
```

```
sql = "SELECT Kedalaman, N1, N2, N3, N, ket_tanah FROM tabel_spt WHERE id_titik  
="" & Text1.Text & "" AND id_proyek ="" & Text3.Text & "" "
```

```
rs.Open sql, db, adOpenDynamic, adLockOptimistic
```

```
Set DataGrid1.DataSource = rs
```

```
End Sub
```

```
Private Sub btn_analisa_Click()
```

```
Dim sql As String
```

```
Dim B As Single
```

```
Dim az1, az2 As Currency
```

```
Call koneksi
```

```
On Error GoTo eror
```

```
az1 = Combo11.Text
```

```
az2 = Text7.Text
```

```
If Combo11.Text = "" Then
```

```
MsgBox "Lebar (B) tidak boleh kosong", vbExclamation, "Kesalahan"
```

```
Else
```

```
Combo14.Text = az1 + az2
```

```
End If
```

```
Set rs = New Recordset
```



```
sql = "SELECT AVG(N) FROM tabel_spt WHERE id_titik =" & Text1.Text & "' AND  
id_proyek =" & Text3.Text & "' AND Kedalaman >=" & Text7.Text & "' AND  
Kedalaman <=" & Combo14.Text & "' "
```

```
Set rs = db.Execute(sql)
```

```
Text5.Text = rs.Fields("AVG(N)")
```

```
Nrt = Text5.Text
```

```
B = Combo11.Text
```

```
'Mencari Nilai qa, untuk B jika <= 1,2 m
```

```
qa1 = 1.22 * Nrt
```

```
'Mencari Nilai qa, untuk B jika > 1,2 m
```

```
qa2 = 0.54 * Nrt * ((B + 0.3) / B) ^ 2
```

```
If B <= 1.2 Then
```

```
Text6.Text = qa1
```

```
ElseIf B > 1.2 Then
```

```
Text6.Text = qa2
```

```
End If
```

```
Exit Sub
```

```
error: MsgBox Err.Description
```

```
End Sub
```

```
Private Sub btn_baru_Click()
```

```
Adodc2.Recordset.AddNew
```

```
Adodc2.Recordset.Fields("id_proyek") = Text3.Text
```

```
Adodc2.Recordset.Fields("id_titik") = Text1.Text
```



Adodc2.Recordset.Fields("kedalaman_p") = 0

Adodc2.Recordset.Fields("panjang_p") = 0

Adodc2.Recordset.Fields("lebar_p") = 0

Adodc2.Recordset.Fields("kedalaman_maks") = 0

Adodc2.Recordset.Fields("kedalaman_interval") = 0

Text10.Enabled = True

Combo12.Enabled = True

Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

End Sub

Private Sub btn_grafik_Click()

Dim delta As Single

B = Combo11.Text

pic_pondasiA.Visible = True

pic_pondasiB.Visible = True

delta = Text7.Text

ab = delta * 120

pondasiA = 255 + ab

pondasiB = 1080 + ab

pic_pondasiA.Height = pondasiA

pic_pondasiB.Top = pondasiB

Shape3.Height = 0 + B * SkalaY

Shape3.Top = delta * SkalaY



'-----

Picture1.Refresh

Set rs = New ADODB.Recordset

sql = "SELECT Kedalaman, N FROM tabel_spt WHERE id_titik = " & Text1.Text & ""
AND id_proyek = " & Text3.Text & ""

rs.Open (sql), db, adOpenDynamic, adLockOptimistic

rs.MoveFirst

Do Until rs.EOF

 X1 = rs.Fields("N").Value

 Y1 = rs.Fields("Kedalaman").Value

rs.MoveNext

If rs.EOF = False Then

 X2 = rs.Fields("N").Value

 Y2 = rs.Fields("Kedalaman").Value

End If

Picture1.Line (X1 * SkalaX, Y1 * SkalaY)-(X2 * SkalaX, Y2 * SkalaY), vbBlue

Loop

End Sub

Private Sub btn_hapus_Click()

Dim pesan As Integer



```
pesan = MsgBox("Anda yakin menghapus data tersebut?", vbInformation + vbYesNo,  
"Hapus Data !")
```

```
If pesan = vbYes Then
```

```
On Error Resume Next
```

```
sql = "DELETE FROM tabel_spt WHERE id_titik =" & Text1.Text & "' AND id_proyek  
=" & Text3.Text & "' "
```

```
db.Execute (sql)
```

```
Adodc2.Recordset.Delete
```

```
Text10.Text = ""
```

```
Combo12.Text = ""
```

```
Combo11.Text = ""
```

```
Text7.Text = ""
```

```
End If
```

```
Call tampilan
```

```
Call kolom
```

```
End Sub
```

```
Private Sub btn_kembali_Click()
```

```
Form1.Enabled = True
```

```
Unload Me
```

```
End Sub
```

```
Private Sub btn_edit_Click()
```

```
If btn_edit.Caption = "Edit Data" Then
```

```
btn_edit.Caption = "Simpan"
```

```
DataGrid1.AllowUpdate = True
```

```
btn_hapus.Enabled = True
```




```
Else
On Error Resume Next
Adodc1.Recordset.Update
Adodc2.Recordset.Update
btn_hapus.Enabled = False
DataGrid1.AllowUpdate = False
btn_edit.Caption = "Edit Data"
MsgBox "Data telah diperbaharui", vbInformation, "Data CPT"
End If
End Sub

Private Sub btn_OK_Click()
Dim awal, akhir As Byte

Dim interval As Currency

awal = Text2.Text
akhir = Text10.Text
interval = Combo12.Text

Do While awal <= akhir

Adodc1.Recordset.AddNew

Adodc1.Recordset.Fields("id_proyek") = Text3.Text

Adodc1.Recordset.Fields("id_titik") = Text1.Text

Adodc1.Recordset.Fields("Kedalaman") = awal

Adodc1.Recordset.Fields("N1") = 0
```



Adodc1.Recordset.Fields("N2") = 0

Adodc1.Recordset.Fields("N3") = 0

Adodc1.Recordset.Fields("N") = None

Adodc1.Recordset.Fields("ket_tanah") = None

awal = awal + interval

Loop

Set DataGrid1.DataSource = Adodc1.Recordset

Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &
Text3.Text & " "

Call tampilan

Call kolom

End Sub

Private Sub btn_OK2_Click()

Dim sql As String

Set rs = New Recordset

sql = "UPDATE tabel_spt SET ket_tanah =" & Text4.Text & " WHERE id_titik =" &
Text1.Text & " AND id_proyek =" & Text3.Text & " AND Kedalaman >=" &
Text8.Text & " AND Kedalaman <=" & Text9.Text & " "

Set rs = db.Execute(sql)

Set DataGrid1.DataSource = rs

Adodc1.Refresh



```
Set DataGrid1.DataSource = Adodc1
```

```
Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & " AND id_proyek =" &  
Text3.Text & " "
```

```
Call tampilan
```

```
Call kolom
```

```
End Sub
```

```
Private Sub btn_print_Click()
```

```
Dim sql As String
```

```
FrmPrintSPT.Show
```

```
FrmPrintSPT.CurrentX = 2200
```

```
FrmPrintSPT.CurrentY = 400
```

```
FrmPrintSPT.FontSize = FrmUjiSPT.FontSize
```

```
FrmPrintSPT.Print FrmUjiSPT.Caption
```

```
FrmPrintSPT.CurrentX = 1000
```

```
FrmPrintSPT.Print "-----"  
-----"
```

```
FrmPrintSPT.CurrentX = 2200
```

```
FrmPrintSPT.FontSize = 14
```

```
FrmPrintSPT.Print Label7.Caption
```

```
FrmPrintSPT.Print ""
```

```
FrmPrintSPT.FontName = "arial"
```

```
FrmPrintSPT.FontSize = 10
```

```
FrmPrintSPT.CurrentX = 1000
```

```
FrmPrintSPT.Print Label1.Caption & vbTab & vbTab & Text1.Text
```

```
FrmPrintSPT.FontName = "arial"
```



```
FrmPrintSPT.FontSize = 10

FrmPrintSPT.CurrentX = 1000

FrmPrintSPT.Print Label2.Caption & vbTab & vbTab & Text10.Text & " (m)"

FrmPrintSPT.FontName = "arial"

FrmPrintSPT.FontSize = 10

FrmPrintSPT.CurrentX = 1000

FrmPrintSPT.Print Label3.Caption & vbTab & vbTab & vbTab & Combo12.Text & "
(m)"

FrmPrintSPT.FontName = "arial"

FrmPrintSPT.FontSize = 10

FrmPrintSPT.CurrentX = 1000

FrmPrintSPT.Print Label4.Caption & vbTab & vbTab & vbTab & Combo11.Text & "
(m)"

FrmPrintSPT.FontName = "arial"

FrmPrintSPT.FontSize = 10

FrmPrintSPT.CurrentX = 1000

FrmPrintSPT.Print Label5.Caption & vbTab & vbTab & Text7.Text & " (m)"

FrmPrintSPT.FontName = "arial"

FrmPrintSPT.FontSize = 10

FrmPrintSPT.CurrentX = 1000

FrmPrintSPT.Print "Daya Dukung (qa):" & vbTab & vbTab & Text6.Text & " (t/m2)"

FrmPrintSPT.Print ""

FrmPrintSPT.CurrentX = 1600

FrmPrintSPT.Print "Kedalaman (m)" & vbTab & " N spt (N2+N3)"

'

Set rs = New ADODB.Recordset
```



```
sql = "SELECT Kedalaman, N FROM tabel_spt WHERE id_titik =" & Text1.Text & "  
AND id_proyek =" & Text3.Text & ""
```

```
rs.Open (sql), db, adOpenDynamic, adLockOptimistic
```

```
Do Until rs.EOF
```

```
    Debug.Print rs.Fields("Conus").Value
```

```
    X1 = rs.Fields("Kedalaman").Value
```

```
    Y1 = rs.Fields("N").Value
```

```
    rs.MoveNext
```

```
    FrmPrintSPT.CurrentX = 2200
```

```
    FrmPrintSPT.Print X1 & vbTab & vbTab & vbTab & Y1
```

```
Loop
```

```
FrmPrintSPT.CurrentX = 1000
```

```
FrmPrintSPT.Print "-----"
```

```
FrmPrintSPT.CurrentX = 1200
```

```
FrmPrintSPT.FontName = "Comic Sans MS"
```

```
FrmPrintSPT.FontSize = 10
```

```
FrmPrintSPT.Print "printed at : " & Date
```

```
End Sub
```

```
Private Sub Command1_Click()
```

```
    If Command1.Caption = "Ganti kode" Then
```

```
        Command1.Caption = "OK"
```

```
        Text1.Enabled = True
```

```
    Else
```



```
Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & "' AND id_proyek =" &  
Text3.Text & "' "
```

```
Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & "' AND id_proyek =" &  
Text3.Text & "' "
```

```
Text1.Enabled = False
```

```
Call tampilan
```

```
Call kolom
```

```
Command1.Caption = "Ganti kode"
```

```
End If
```

```
End Sub
```

```
Private Sub Command3_Click()
```

```
FrmEdit.Show
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
Call koneksi
```

```
Call tampilan
```

```
Call kolom
```

```
Text3.Text = Form1.Text6.Text
```

```
Label7.Caption = Form1.Text1.Text
```

```
Adodc1.Recordset.Filter = "id_titik =" & Text1.Text & "' AND id_proyek =" &  
Text3.Text & "' "
```

```
Adodc2.Recordset.Filter = "id_titik =" & Text1.Text & "' AND id_proyek =" &  
Text3.Text & "' "
```



Combo11.AddItem "0.5"

Combo11.AddItem "1"

Combo11.AddItem "1.5"

Combo11.AddItem "2"

Combo11.AddItem "2.5"

Combo11.AddItem "3"

Combo12.AddItem "1"

Combo12.AddItem "1.5"

Combo12.AddItem "2"

'nilai skala dalam menggambar pada VB

SkalaX = 60.25

SkalaY = 120.3

'Titik acuan sumbu Y, sebagai titik nol sumbu Y

End Sub





Lampiran 5

Tabel faktor daya dukung tanah *Terzaghi (Donald P. Coduto)*

ϕ' (deg)	N_c	N_q	N_γ
0	5,7	1,0	0,0
1	6,0	1,1	0,1
2	6,3	1,2	0,1
3	6,6	1,3	0,2
4	7,0	1,5	0,3
5	7,3	1,6	0,4
6	7,7	1,8	0,5
7	8,2	2,0	0,6
8	8,6	2,2	0,7
9	9,1	2,4	0,9
10	9,6	2,7	1,0
11	10,2	3,0	1,2
12	10,8	3,3	1,4
13	11,4	3,6	1,6
14	12,1	4,0	1,9
15	12,9	4,4	2,2
16	13,7	4,9	2,5
17	14,6	5,5	2,9
18	15,5	6,0	3,3
19	16,6	6,7	3,8
20	17,7	7,4	4,4
21	18,9	8,3	5,1
22	20,3	9,2	5,9
23	21,7	10,2	6,8
24	23,4	11,4	7,9
25	25,1	12,7	9,2
26	27,1	14,2	10,7
27	29,2	15,9	12,5
28	31,6	17,8	14,6
29	34,2	20,0	17,1
30	37,2	22,5	20,1
31	40,4	25,3	23,7
32	44,0	28,5	28,0
33	48,1	32,2	33,3
34	52,6	36,5	39,6
35	57,8	41,4	47,3
36	63,5	47,2	56,7
37	70,1	53,8	68,1
38	77,5	61,5	82,3
39	86,0	70,6	99,8
40	95,7	81,3	121,5
41	106,8	93,8	148,5

Sumber : (*Foundation Design, Donald P. Coduto 2001*)