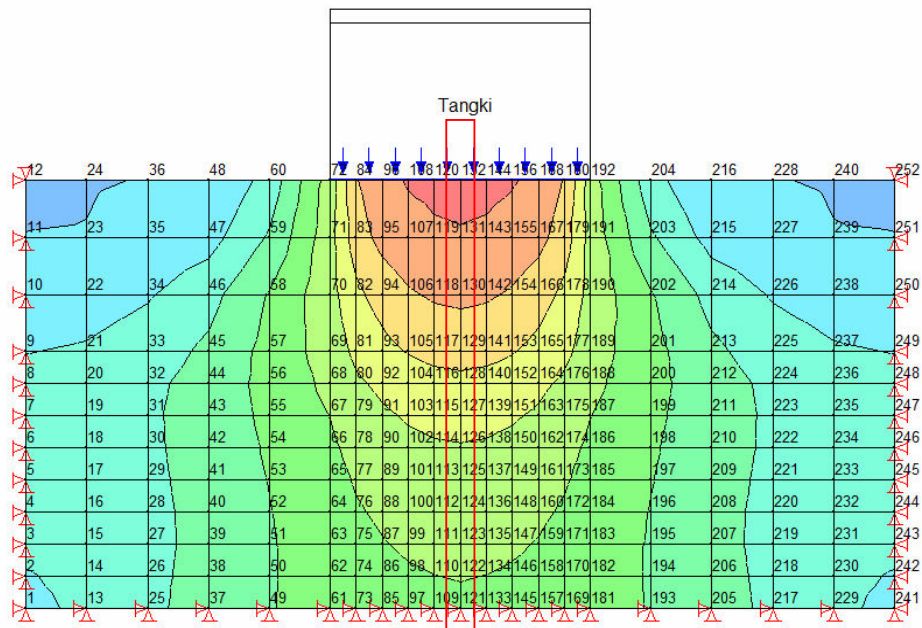


LAMPIRAN 1

HASIL OUTPUT BEBAN SATU TANGKI

L1.1 Hasil output Tangki Tipe 1

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 1 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L1.1**.



Gambar L1.1 Penomoran titik tipe 1

Nilai Maksimum Tegangan Total dapat dilihat pada **Tabel L1.1**

Tabel L1.1 Nilai maksimum tegangan total pada tipe 1

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+7.8448e+001
122	+5.0000e+001	+3.7500e+000	+8.0340e+001
123	+5.0000e+001	+7.5000e+000	+8.4171e+001
124	+5.0000e+001	+1.1250e+001	+8.8301e+001
125	+5.0000e+001	+1.5000e+001	+9.3110e+001
126	+5.0000e+001	+1.8750e+001	+9.8938e+001
127	+5.0000e+001	+2.2500e+001	+1.0610e+002
128	+5.0000e+001	+2.6250e+001	+1.1490e+002
129	+5.0000e+001	+3.0000e+001	+1.2729e+002
130	+5.0000e+001	+3.6667e+001	+1.4418e+002
131	+5.0000e+001	+4.3333e+001	+1.5880e+002
132	+5.0000e+001	+5.0000e+001	+1.6408e+002

Nilai Minimum Tegangan Total dapat dilihat pada **Tabel L1.2**

Tabel L1.2 Nilai Minimum Tegangan Total

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+2.8460e+001

Lanjutan Tabel L1.2 Nilai Minimum Tegangan Total

Node	X Coordinate	Y Coordinate	Min TStress1
122	+5.0000e+001	+3.7500e+000	+2.4688e+001
123	+5.0000e+001	+7.5000e+000	+1.8116e+001
124	+5.0000e+001	+1.1250e+001	+1.3236e+001
125	+5.0000e+001	+1.5000e+001	+9.6449e+000
126	+5.0000e+001	+1.8750e+001	+7.1418e+000
127	+5.0000e+001	+2.2500e+001	+5.7251e+000
128	+5.0000e+001	+2.6250e+001	+5.6771e+000
129	+5.0000e+001	+3.0000e+001	+1.4057e+001
130	+5.0000e+001	+3.6667e+001	+2.9039e+001
131	+5.0000e+001	+4.3333e+001	+5.9701e+001
132	+5.0000e+001	+5.0000e+001	+8.3387e+001

Nilai Maksimum Tegangan Efektif dapat dilihat pada **Tabel L1.3**

Tabel L1.3 Nilai Maksimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Max EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+7.8448e+001
122	+5.0000e+001	+3.7500e+000	+8.0340e+001
123	+5.0000e+001	+7.5000e+000	+8.4171e+001
124	+5.0000e+001	+1.1250e+001	+8.8301e+001
125	+5.0000e+001	+1.5000e+001	+9.3110e+001
126	+5.0000e+001	+1.8750e+001	+9.8938e+001
127	+5.0000e+001	+2.2500e+001	+1.0610e+002

Lanjutan Tabel L1.3 Nilai Maksimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Max EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
128	+5.0000e+001	+2.6250e+001	+1.1490e+002
129	+5.0000e+001	+3.0000e+001	+1.2729e+002
130	+5.0000e+001	+3.6667e+001	+1.4418e+002
131	+5.0000e+001	+4.3333e+001	+1.5880e+002
132	+5.0000e+001	+5.0000e+001	+1.6408e+002

Nilai Minimum Tegangan Efektif dapat dilihat pada **Tabel L1.4**

Tabel L1.4 Nilai Minimum Tegangan Efektif

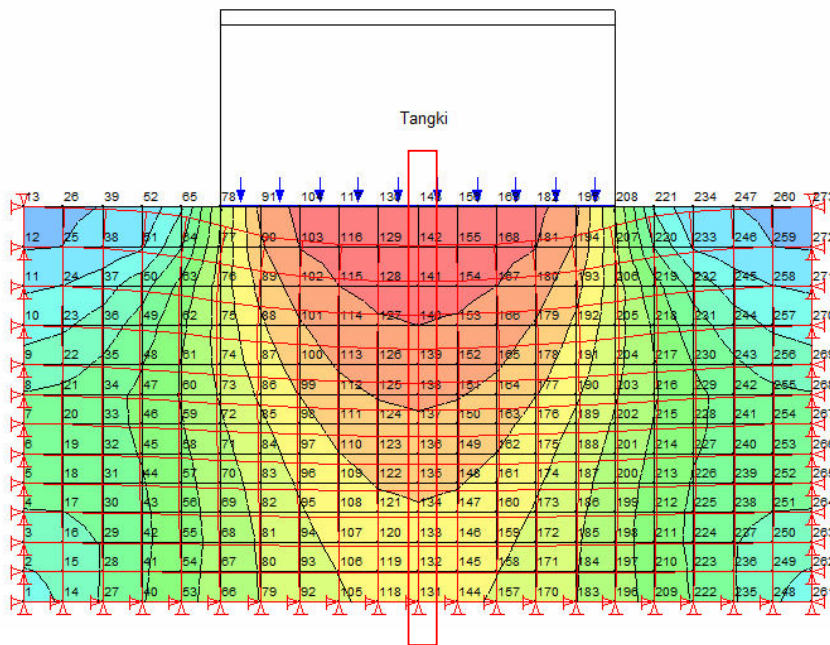
Node	X Coordinate	Y Coordinate	Min EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+2.8460e+001
122	+5.0000e+001	+3.7500e+000	+2.4688e+001
123	+5.0000e+001	+7.5000e+000	+1.8116e+001
124	+5.0000e+001	+1.1250e+001	+1.3236e+001
125	+5.0000e+001	+1.5000e+001	+9.6449e+000
126	+5.0000e+001	+1.8750e+001	+7.1418e+000
127	+5.0000e+001	+2.2500e+001	+5.7251e+000
128	+5.0000e+001	+2.6250e+001	+5.6771e+000
129	+5.0000e+001	+3.0000e+001	+1.4057e+001
130	+5.0000e+001	+3.6667e+001	+2.9039e+001
131	+5.0000e+001	+4.3333e+001	+5.9701e+001

Lanjutan Tabel L1.4 Nilai Minimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Min EStress I
-	---Elapsed--	--Time----->	+1.0000e+000
132	+5.0000e+001	+5.0000e+001	+8.3387e+001

L1.2 Hasil output Tangki Tipe 2

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 1 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L1.2**.



Gambar L1.2 Penomoran titik tipe 2

Nilai Maksimum Tegangan Total dapat dilihat pada **Tabel L1.5**

Tabel L1.5 Nilai Maksimum Tegangan Total

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+1.4442e+002
122	+5.0000e+001	+3.7500e+000	+1.4709e+002
123	+5.0000e+001	+7.5000e+000	+1.5235e+002
124	+5.0000e+001	+1.1250e+001	+1.5767e+002
125	+5.0000e+001	+1.5000e+001	+1.6338e+002
126	+5.0000e+001	+1.8750e+001	+1.6969e+002
127	+5.0000e+001	+2.2500e+001	+1.7664e+002
128	+5.0000e+001	+2.6250e+001	+1.8408e+002
129	+5.0000e+001	+3.0000e+001	+1.9261e+002
130	+5.0000e+001	+3.6667e+001	+2.0148e+002
131	+5.0000e+001	+4.3333e+001	+2.0670e+002
132	+5.0000e+001	+5.0000e+001	+2.0777e+002

Nilai Minimum Tegangan Total dapat dilihat pada **Tabel L1.6**

Tabel L1.6 Nilai Minimum Tegangan Total

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+5.4396e+001
122	+5.0000e+001	+3.7500e+000	+4.8927e+001
123	+5.0000e+001	+7.5000e+000	+3.9516e+001

Lanjutan Tabel L1.6 Nilai Minimum Tegangan Total

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
124	+5.0000e+001	+1.1250e+001	+3.2880e+001
125	+5.0000e+001	+1.5000e+001	+2.8599e+001
126	+5.0000e+001	+1.8750e+001	+2.6516e+001
127	+5.0000e+001	+2.2500e+001	+2.6754e+001
128	+5.0000e+001	+2.6250e+001	+2.9767e+001
129	+5.0000e+001	+3.0000e+001	+4.3315e+001
130	+5.0000e+001	+3.6667e+001	+6.3115e+001
131	+5.0000e+001	+4.3333e+001	+8.8162e+001
132	+5.0000e+001	+5.0000e+001	+1.0468e+002

Nilai Maksimum Tegangan Efektif dapat dilihat pada **Tabel L1.7**

Tabel L1.7 Nilai Maksimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Max EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+1.4442e+002
122	+5.0000e+001	+3.7500e+000	+1.4709e+002
123	+5.0000e+001	+7.5000e+000	+1.5235e+002
124	+5.0000e+001	+1.1250e+001	+1.5767e+002
125	+5.0000e+001	+1.5000e+001	+1.6338e+002
126	+5.0000e+001	+1.8750e+001	+1.6969e+002

Lanjutan Tabel L1.7 Nilai Maksimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Max EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
127	+5.0000e+001	+2.2500e+001	+1.7664e+002
128	+5.0000e+001	+2.6250e+001	+1.8408e+002
129	+5.0000e+001	+3.0000e+001	+1.9261e+002
130	+5.0000e+001	+3.6667e+001	+2.0148e+002
131	+5.0000e+001	+4.3333e+001	+2.0670e+002
132	+5.0000e+001	+5.0000e+001	+2.0777e+002

Nilai Minimum Tegangan Efektif dapat dilihat pada **Tabel L1.8**

Tabel L1.8 Nilai Minimum Tegangan Efektif

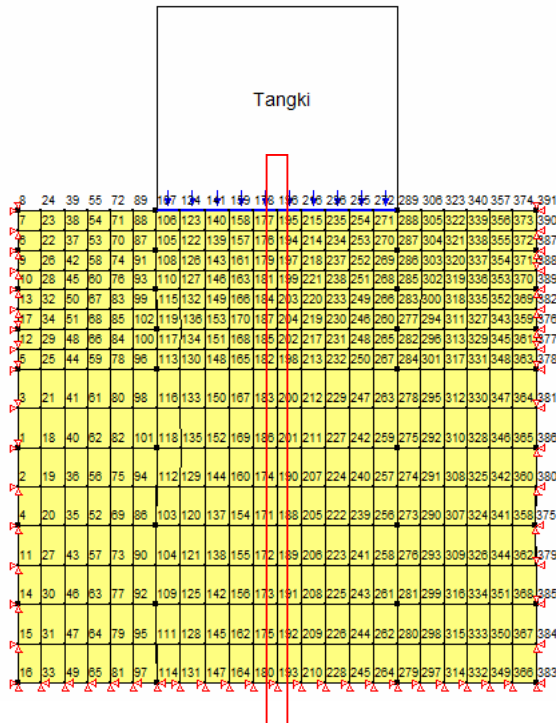
Node	X Coordinate	Y Coordinate	Min EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
121	+5.0000e+001	+0.0000e+000	+5.4396e+001
122	+5.0000e+001	+3.7500e+000	+4.8927e+001
123	+5.0000e+001	+7.5000e+000	+3.9516e+001
124	+5.0000e+001	+1.1250e+001	+3.2880e+001
125	+5.0000e+001	+1.5000e+001	+2.8599e+001
126	+5.0000e+001	+1.8750e+001	+2.6516e+001
127	+5.0000e+001	+2.2500e+001	+2.6754e+001
128	+5.0000e+001	+2.6250e+001	+2.9767e+001
129	+5.0000e+001	+3.0000e+001	+4.3315e+001

Lanjutan Tabel L1.8 Nilai Minimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Min EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
130	+5.0000e+001	+3.6667e+001	+6.3115e+001
131	+5.0000e+001	+4.3333e+001	+8.8162e+001
132	+5.0000e+001	+5.0000e+001	+1.0468e+002

L1.3 Hasil output Tangki Tipe 3

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 1 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L1.3**.



Gambar L1.3 Penomoran titik tipe 3

Nilai Maksimum Tegangan Total dapat dilihat pada **Tabel L1.9**

Tabel L1.9 Nilai Maksimum Tegangan Total

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
188	+4.9985e+001	+3.0490e+001	+1.1041e+002
189	+4.9991e+001	+2.2863e+001	+1.0245e+002
190	+4.9996e+001	+3.8113e+001	+1.2133e+002
191	+4.9997e+001	+1.5235e+001	+9.6529e+001
192	+5.0000e+001	+7.6299e+000	+9.1632e+001
193	+5.0002e+001	+2.4320e-002	+8.9304e+001
194	+5.0002e+001	+8.3830e+001	+2.5802e+002
195	+5.0002e+001	+8.7642e+001	+2.6211e+002
196	+5.0002e+001	+9.1454e+001	+2.6314e+002
197	+5.0004e+001	+8.0023e+001	+2.4982e+002
198	+5.0005e+001	+6.0948e+001	+1.7633e+002
199	+5.0005e+001	+7.6215e+001	+2.3795e+002
200	+5.0005e+001	+5.3342e+001	+1.5549e+002
201	+5.0006e+001	+4.5736e+001	+1.3610e+002
202	+5.0007e+001	+6.4772e+001	+1.9360e+002
203	+5.0007e+001	+7.2405e+001	+2.2374e+002
204	+5.0009e+001	+6.8596e+001	+2.0861e+002

Nilai Minimum Tegangan Total dapat dilihat pada **Tabel L1.10**

Tabel L1.10 Nilai Minimum Tegangan Total

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
188	+4.9985e+001	+3.0490e+001	+1.6927e+001
189	+4.9991e+001	+2.2863e+001	+1.8827e+001
190	+4.9996e+001	+3.8113e+001	+1.5820e+001
191	+4.9997e+001	+1.5235e+001	+2.2241e+001
192	+5.0000e+001	+7.6299e+000	+2.8365e+001
193	+5.0002e+001	+2.4320e-002	+3.2283e+001
194	+5.0002e+001	+8.3830e+001	+1.2658e+002
195	+5.0002e+001	+8.7642e+001	+1.7231e+002
196	+5.0002e+001	+9.1454e+001	+1.9721e+002
197	+5.0004e+001	+8.0023e+001	+8.9876e+001
198	+5.0005e+001	+6.0948e+001	+1.9457e+001
199	+5.0005e+001	+7.6215e+001	+6.2788e+001
200	+5.0005e+001	+5.3342e+001	+1.6376e+001
201	+5.0006e+001	+4.5736e+001	+1.5374e+001
202	+5.0007e+001	+6.4772e+001	+2.4353e+001
203	+5.0007e+001	+7.2405e+001	+4.4110e+001
204	+5.0009e+001	+6.8596e+001	+3.1925e+001

Nilai Maksimum Tegangan Efektif dapat dilihat pada **Tabel L1.11**

Tabel L1.11 Nilai Maksimum Tegangan Efektif

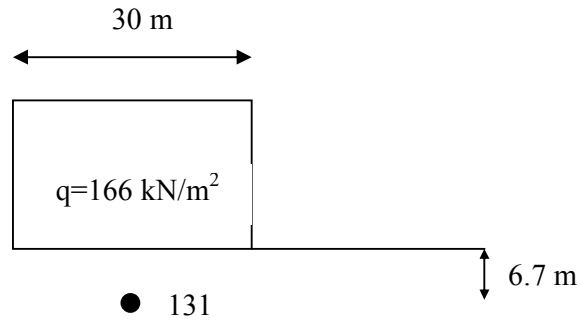
Node	X Coordinate	Y Coordinate	Max EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
188	+4.9985e+001	+3.0490e+001	+1.1041e+002
189	+4.9991e+001	+2.2863e+001	+1.0245e+002
190	+4.9996e+001	+3.8113e+001	+1.2133e+002
191	+4.9997e+001	+1.5235e+001	+9.6529e+001
192	+5.0000e+001	+7.6299e+000	+9.1632e+001
193	+5.0002e+001	+2.4320e-002	+8.9304e+001
194	+5.0002e+001	+8.3830e+001	+2.5802e+002
195	+5.0002e+001	+8.7642e+001	+2.6211e+002
196	+5.0002e+001	+9.1454e+001	+2.6314e+002
197	+5.0004e+001	+8.0023e+001	+2.4982e+002
198	+5.0005e+001	+6.0948e+001	+1.7633e+002
199	+5.0005e+001	+7.6215e+001	+2.3795e+002
200	+5.0005e+001	+5.3342e+001	+1.5549e+002
201	+5.0006e+001	+4.5736e+001	+1.3610e+002
202	+5.0007e+001	+6.4772e+001	+1.9360e+002
203	+5.0007e+001	+7.2405e+001	+2.2374e+002
204	+5.0009e+001	+6.8596e+001	+2.0861e+002

Nilai Minimum Tegangan Efektif dapat dilihat pada **Tabel L1.12**

Tabel L1.12 Nilai Minimum Tegangan Efektif

Node	X Coordinate	Y Coordinate	Min EStress I
-	---Elapsed--	--Time----->	+1.0000e+000
188	+4.9985e+001	+3.0490e+001	+1.6927e+001
189	+4.9991e+001	+2.2863e+001	+1.8827e+001
190	+4.9996e+001	+3.8113e+001	+1.5820e+001
191	+4.9997e+001	+1.5235e+001	+2.2241e+001
192	+5.0000e+001	+7.6299e+000	+2.8365e+001
193	+5.0002e+001	+2.4320e-002	+3.2283e+001
194	+5.0002e+001	+8.3830e+001	+1.2658e+002
195	+5.0002e+001	+8.7642e+001	+1.7231e+002
196	+5.0002e+001	+9.1454e+001	+1.9721e+002
197	+5.0004e+001	+8.0023e+001	+8.9876e+001
198	+5.0005e+001	+6.0948e+001	+1.9457e+001
199	+5.0005e+001	+7.6215e+001	+6.2788e+001
200	+5.0005e+001	+5.3342e+001	+1.6376e+001
201	+5.0006e+001	+4.5736e+001	+1.5374e+001
202	+5.0007e+001	+6.4772e+001	+2.4353e+001
203	+5.0007e+001	+7.2405e+001	+4.4110e+001
204	+5.0009e+001	+6.8596e+001	+3.1925e+001

- **Perhitungan Manual untuk pembebanan satu tangki tipe 1**



Tambahan tegangan vertikal dipusat tangki pada kedalaman 6.7m:

$$z = 6.7 \text{ m}$$

$$r = 30/2 \\ = 15 \text{ m}$$

$$x = 0$$

$$z/r = 6.7/15 \\ = 0.447$$

$$x/r = 0$$

dari **Gambar 2.16** diperoleh nilai $I = 88\% = 0.88$

$$\text{jadi } \Delta\sigma_z = q \cdot I = 166 \times 0.88 = 146.08 \text{ kN/m}^2$$

dari hasil perhitungan program untuk Tegangan arah z didapatkan nilai sebagai berikut:

Node 131, Step 1	Value
X-Coordinate	50.00000
Y-Coordinate	43.333333
X-Displacement	-4.0766e-017
Y-Displacement	-1.6313e-001
XY-Displacement	1.6313e-001
X-Boundary Force	0.0000e+000
Y-Boundary Force	0.0000e+000
XY-Boundary Force	0.0000e+000
X-Total Stress	5.9701e+001
Y-Total Stress	1.5880e+002
Z-Total Stress	6.5551e+001
Max. Total Stress	1.5880e+002
Min. Total Stress	5.9701e+001
Mean Tot. Stress (p)	9.4685e+001
X-Effective Stress	5.9701e+001
Y-Effective Stress	1.5880e+002
Z-Effective Stress	6.5551e+001
Maximum Eff. Stress	1.5880e+002
Minimum Eff. Stress	5.9701e+001
Mean Eff. Stress (p')	9.4685e+001
X-Y Shear Stress	5.5511e-017
Max. Shear Stress	4.9551e+001
Deviatoric Stress (q)	9.6311e+001
Pore-Water Pressure	0.0000e+000
X-Strain	-3.8027e-004
Y-Strain	6.0614e-003
Z-Strain	0.0000e+000
X-Y Shear Strain	3.0493e-020
Maximum Strain	6.0614e-003
Minimum Strain	-3.8027e-004
Max. Shear Strain	6.4417e-003
Volumetric Strain	5.6811e-003
Deviatoric Strain	6.2602e-003
Poisson's Ratio	3.0000e-001
Undrn Shear Strngth	0.0000e+000
Void Ratio	0.0000e+000
Tan. Modulus (E)	2.0000e+004
Moment	0.0000e+000
Rotation	0.0000e+000
Axial Force	0.0000e+000
Shear Force	0.0000e+000

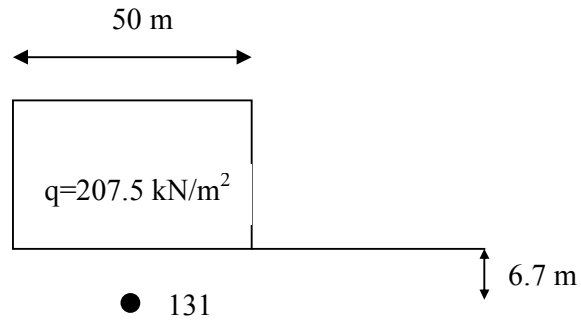
Node 131, Step 1

$$Z\text{-Total Stress } 6.5551e+001 = 65.551 \text{ kN/m}^2$$

Nilai yang dihasilkan program Sigma/W, Geostudio lebih kecil dari pada perhitungan manual karena adanya pembagian segmen yang lebih teliti dan dalam pembacaan nilai I pada perhitungan manual tidak dapat akurat. Presentase perbedaan antara hitungan manual dan hitungan program sebagai berikut:

$$\begin{aligned} \% &= (146.08 - 65.551) / 146.08 \times 100\% \\ &= 55.125\% \end{aligned}$$

- **Perhitungan Manual untuk pembebanan satu tangki tipe 2**



Tambahan tegangan vertikal dipusat tangki pada kedalaman 6.7m:

$$z = 6.7 \text{ m}$$

$$r = 50/2 \\ = 25 \text{ m}$$

$$x = 0$$

$$z/r = 6.7/25 \\ = 0.268$$

$$x/r = 0$$

dari **Gambar 2.16** diperoleh nilai $I = 98\% = 0.98$

$$\text{jadi } \Delta\sigma_z = q \cdot I = 207.5 \times 0.98 = 203.35 \text{ kN/m}^2$$

dari hasil perhitungan program untuk Tegangan arah z didapatkan nilai sebagai berikut:

Node 131, Step 1	Value
X-Coordinate	50.00000
Y-Coordinate	43.333333
X-Displacement	-5.2042e-018
Y-Displacement	-2.4380e-001
XY-Displacement	2.4380e-001
X-Boundary Force	0.0000e+000
Y-Boundary Force	0.0000e+000
XY-Boundary Force	0.0000e+000
X-Total Stress	8.8162e+001
Y-Total Stress	2.0670e+002
Z-Total Stress	8.8459e+001
Max. Total Stress	2.0670e+002
Min. Total Stress	8.8162e+001
Mean Tot. Stress (p)	1.2777e+002
X-Effective Stress	8.8162e+001
Y-Effective Stress	2.0670e+002
Z-Effective Stress	8.8459e+001
Maximum Eff. Stress	2.0670e+002
Minimum Eff. Stress	8.8162e+001
Mean Eff. Stress (p')	1.2777e+002
X-Y Shear Stress	-6.9389e-017
Max. Shear Stress	5.9270e+001
Deviatoric Stress (q)	1.1839e+002
Pore-Water Pressure	0.0000e+000
X-Strain	-1.9320e-005
Y-Strain	7.6858e-003
Z-Strain	0.0000e+000
X-Y Shear Strain	3.3881e-021
Maximum Strain	7.6858e-003
Minimum Strain	-1.9320e-005
Max. Shear Strain	7.7051e-003
Volumetric Strain	7.6664e-003
Deviatoric Strain	7.6954e-003
Poisson's Ratio	3.0000e-001
Undrn Shear Strngth	0.0000e+000
Void Ratio	0.0000e+000
Tan. Modulus (E)	2.0000e+004
Moment	0.0000e+000
Rotation	0.0000e+000
Axial Force	0.0000e+000
Shear Force	0.0000e+000

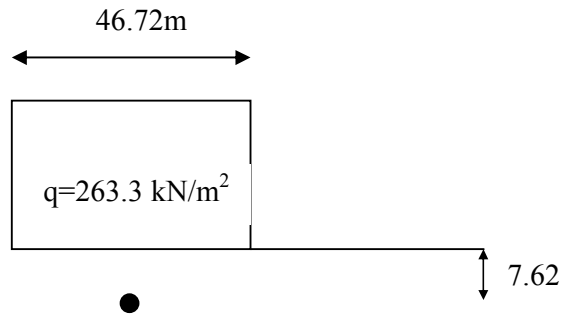
Node 131, Step 1

Z-Total Stress $8.8459e+001 = 88.459 \text{ kN/m}^2$

Nilai yang dihasilkan program Sigma/W, Geostudio lebih kecil dari pada perhitungan manual karena adanya pembagian segmen yang lebih teliti dan dalam pembacaan nilai I pada perhitungan manual tidak dapat akurat. Presentase perbedaan antara hitungan manual dan hitungan program sebagai berikut:

$$\begin{aligned} \% &= (203.35 - 88.459) / 203.35 \times 100\% \\ &= 56.499\% \end{aligned}$$

- **Perhitungan Manual untuk pembebanan satu tangki tipe 3**



Tambahan tegangan vertikal dipusat tangki pada kedalaman 7.62 m:

$$z = 7.62 \text{ m}$$

$$r = 46.72/2$$

$$= 23.36 \text{ m}$$

$$x = 0$$

$$z/r = 7.62/23.36$$

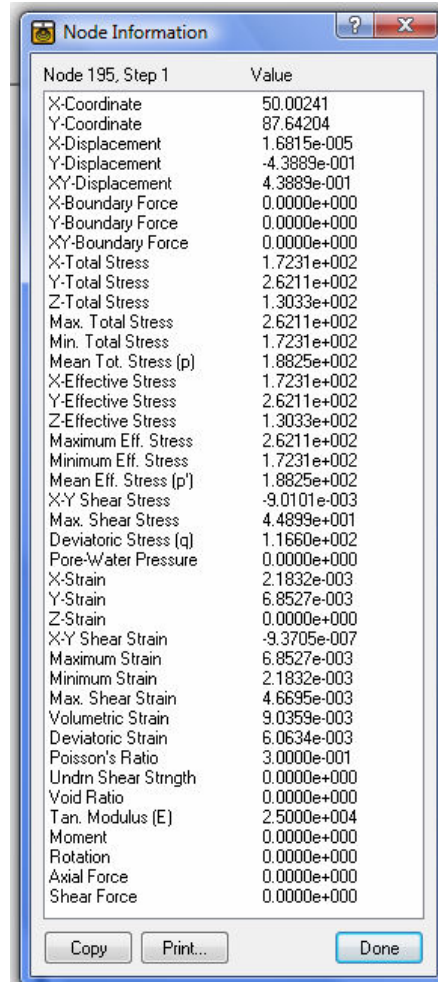
$$= 0.326$$

$$x/r = 0$$

dari **Gambar 2.16** diperoleh nilai $I = 90\% = 0.9$

$$\text{jadi } \Delta\sigma_z = q \cdot I = 263.3 \times 0.9 = 236.97 \text{ kN/m}^2$$

dari hasil perhitungan program untuk Tegangan arah z didapatkan nilai sebagai berikut:



Node 195, Step 1

Z-Total Stress $1.3033e+002 = 130.33 \text{ kN/m}^2$

Nilai yang dihasilkan program Sigma/W, Geostudio lebih kecil dari pada perhitungan manual karena adanya pembagian segmen yang lebih teliti dan dalam pembacaan nilai I pada perhitungan manual tidak dapat akurat. Presentase perbedaan antara hitungan manual dan hitungan program sebagai berikut:

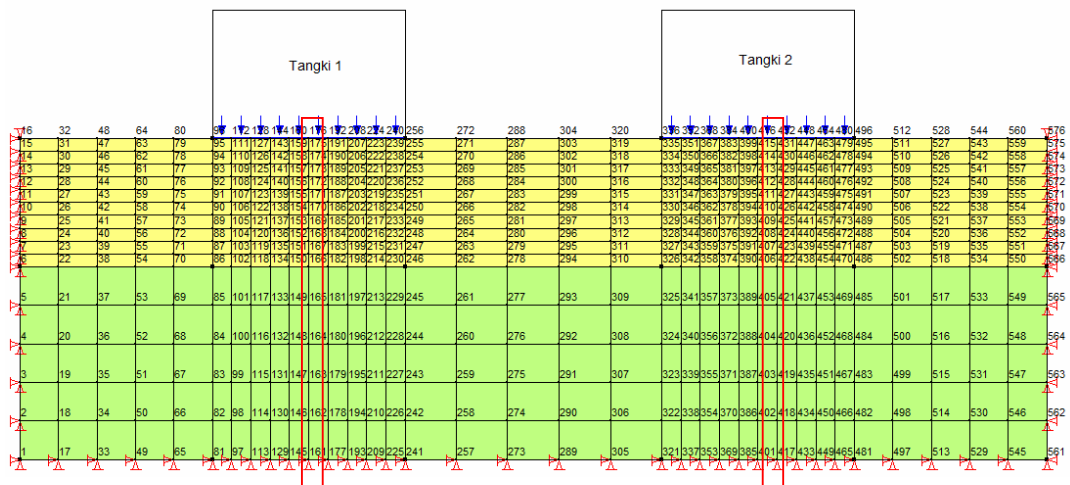
$$\begin{aligned} \% &= (236.97 - 130.33) / 236.97 \times 100\% \\ &= 45\% \end{aligned}$$

LAMPIRAN 2

HASIL OUTPUT BEBAN DUA TANGKI

L2.1 Hasil output dua Tangki

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 2 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada Gambar L2.1.



Gambar L2.1 Penomoran titik model dua tangki

Nilai Maksimum Tegangan Total pada tangki 1 dapat dilihat pada Tabel L2.1

Tabel L2.1 Nilai maksimum tegangan total pada Tangki 1

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
161	+1.5000e+001	+0.0000e+000	+8.2286e+001

Lanjutan Tabel L2.1 Nilai maksimum tegangan total pada Tangki 1

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
162	+1.5000e+001	+6.0000e+000	+8.4833e+001
163	+1.5000e+001	+1.2000e+001	+9.0693e+001
164	+1.5000e+001	+1.8000e+001	+9.8732e+001
165	+1.5000e+001	+2.4000e+001	+1.1014e+002
166	+1.5000e+001	+3.0000e+001	+1.2242e+002
167	+1.5000e+001	+3.2000e+001	+1.3104e+002
168	+1.5000e+001	+3.4000e+001	+1.3709e+002
169	+1.5000e+001	+3.6000e+001	+1.4317e+002
170	+1.5000e+001	+3.8000e+001	+1.4916e+002
171	+1.5000e+001	+4.0000e+001	+1.5477e+002
172	+1.5000e+001	+4.2000e+001	+1.5960e+002
173	+1.5000e+001	+4.4000e+001	+1.6318e+002
174	+1.5000e+001	+4.6000e+001	+1.6526e+002
175	+1.5000e+001	+4.8000e+001	+1.6599e+002
176	+1.5000e+001	+5.0000e+001	+1.6605e+002

Nilai Minimum Tegangan Total pada tangki 1 dapat dilihat pada **Tabel L2.2**

Tabel L2.2 Nilai Minimum Tegangan Total pada Tangki 1

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
161	+1.5000e+001	+0.0000e+000	+2.8769e+001

Lanjutan Tabel L2.2 Nilai Minimum Tegangan Total pada Tangki 1

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
162	+1.5000e+001	+6.0000e+000	+2.4711e+001
163	+1.5000e+001	+1.2000e+001	+1.8064e+001
164	+1.5000e+001	+1.8000e+001	+1.3980e+001
165	+1.5000e+001	+2.4000e+001	+1.2482e+001
166	+1.5000e+001	+3.0000e+001	+1.9040e+001
167	+1.5000e+001	+3.2000e+001	+2.4622e+001
168	+1.5000e+001	+3.4000e+001	+2.3671e+001
169	+1.5000e+001	+3.6000e+001	+2.4800e+001
170	+1.5000e+001	+3.8000e+001	+2.8335e+001
171	+1.5000e+001	+4.0000e+001	+3.4733e+001
172	+1.5000e+001	+4.2000e+001	+4.4509e+001
173	+1.5000e+001	+4.4000e+001	+5.8012e+001
174	+1.5000e+001	+4.6000e+001	+7.5150e+001
175	+1.5000e+001	+4.8000e+001	+9.5116e+001
176	+1.5000e+001	+5.0000e+001	+1.0565e+002

Nilai Maksimum Tegangan Efektif pada tangki 1 dapat dilihat pada **Tabel L2.3**

Tabel L2.3 Nilai Maksimum Tegangan Efektif pada Tangki 1

Node	X Coordinate	Y Coordinate	Max EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
161	+1.5000e+001	+0.0000e+000	+8.2286e+001

Lanjutan Tabel L2.3 Nilai Maksimum Tegangan Efektif pada Tangki 1

Node	X Coordinate	Y Coordinate	Max EStress I
-	---Elapsed--	--Time----->	+1.0000e+000
162	+1.5000e+001	+6.0000e+000	+8.4833e+001
163	+1.5000e+001	+1.2000e+001	+9.0693e+001
164	+1.5000e+001	+1.8000e+001	+9.8732e+001
165	+1.5000e+001	+2.4000e+001	+1.1014e+002
166	+1.5000e+001	+3.0000e+001	+1.2242e+002
167	+1.5000e+001	+3.2000e+001	+1.3104e+002
168	+1.5000e+001	+3.4000e+001	+1.3709e+002
169	+1.5000e+001	+3.6000e+001	+1.4317e+002
170	+1.5000e+001	+3.8000e+001	+1.4916e+002
171	+1.5000e+001	+4.0000e+001	+1.5477e+002
172	+1.5000e+001	+4.2000e+001	+1.5960e+002
173	+1.5000e+001	+4.4000e+001	+1.6318e+002
174	+1.5000e+001	+4.6000e+001	+1.6526e+002
175	+1.5000e+001	+4.8000e+001	+1.6599e+002
176	+1.5000e+001	+5.0000e+001	+1.6605e+002

Nilai Minimum Tegangan Efektif pada tangki 1 dapat dilihat pada **Tabel L2.4**

Tabel L2.4 Nilai Minimum Tegangan Efektif pada Tangki 1

Node	X Coordinate	Y Coordinate	Min EStress I
-	---Elapsed--	--Time----->	+1.0000e+000
161	+1.5000e+001	+0.0000e+000	+2.8769e+001

Lanjutan Tabel L2.4 Nilai Minimum Tegangan Efektif pada Tangki 1

Node	X Coordinate	Y Coordinate	Min EStress1
-	---Elapsed--	--Time----->	+1.0000e+000
162	+1.5000e+001	+6.0000e+000	+2.4711e+001
163	+1.5000e+001	+1.2000e+001	+1.8064e+001
164	+1.5000e+001	+1.8000e+001	+1.3980e+001
165	+1.5000e+001	+2.4000e+001	+1.2482e+001
166	+1.5000e+001	+3.0000e+001	+1.9040e+001
167	+1.5000e+001	+3.2000e+001	+2.4622e+001
168	+1.5000e+001	+3.4000e+001	+2.3671e+001
169	+1.5000e+001	+3.6000e+001	+2.4800e+001
170	+1.5000e+001	+3.8000e+001	+2.8335e+001
171	+1.5000e+001	+4.0000e+001	+3.4733e+001
172	+1.5000e+001	+4.2000e+001	+4.4509e+001
173	+1.5000e+001	+4.4000e+001	+5.8012e+001
174	+1.5000e+001	+4.6000e+001	+7.5150e+001
175	+1.5000e+001	+4.8000e+001	+9.5116e+001
176	+1.5000e+001	+5.0000e+001	+1.0565e+002

Nilai Maksimum Tegangan Total pada tangki 2 dapat dilihat pada **Tabel L2.5**

Tabel L2.5 Nilai maksimum tegangan total pada Tangki 2

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
401	+8.5000e+001	+0.0000e+000	+8.2286e+001

--	--	--	--

Lanjutan Tabel L2.5 Nilai maksimum tegangan total pada Tangki 2

Node	X Coordinate	Y Coordinate	Max TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
402	+8.5000e+001	+6.0000e+000	+8.4833e+001
403	+8.5000e+001	+1.2000e+001	+9.0693e+001
404	+8.5000e+001	+1.8000e+001	+9.8732e+001
405	+8.5000e+001	+2.4000e+001	+1.1014e+002
406	+8.5000e+001	+3.0000e+001	+1.2242e+002
407	+8.5000e+001	+3.2000e+001	+1.3104e+002
408	+8.5000e+001	+3.4000e+001	+1.3709e+002
409	+8.5000e+001	+3.6000e+001	+1.4317e+002
410	+8.5000e+001	+3.8000e+001	+1.4916e+002
411	+8.5000e+001	+4.0000e+001	+1.5477e+002
412	+8.5000e+001	+4.2000e+001	+1.5960e+002
413	+8.5000e+001	+4.4000e+001	+1.6318e+002
414	+8.5000e+001	+4.6000e+001	+1.6526e+002
415	+8.5000e+001	+4.8000e+001	+1.6599e+002
416	+8.5000e+001	+5.0000e+001	+1.6605e+002

Nilai Minimum Tegangan Total pada tangki 2 dapat dilihat pada **Tabel L2.6**

Tabel L2.6 Nilai Minimum Tegangan Total pada Tangki 2

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000

401	+8.5000e+001	+0.0000e+000	+2.8769e+001

Lanjutan Tabel L2.6 Nilai Minimum Tegangan Total pada Tangki 2

Node	X Coordinate	Y Coordinate	Min TStress1
-	---Elapsed--	--Time----->	+1.0000e+000
402	+8.5000e+001	+6.0000e+000	+2.4711e+001
403	+8.5000e+001	+1.2000e+001	+1.8064e+001
404	+8.5000e+001	+1.8000e+001	+1.3980e+001
405	+8.5000e+001	+2.4000e+001	+1.2482e+001
406	+8.5000e+001	+3.0000e+001	+1.9040e+001
407	+8.5000e+001	+3.2000e+001	+2.4622e+001
408	+8.5000e+001	+3.4000e+001	+2.3671e+001
409	+8.5000e+001	+3.6000e+001	+2.4800e+001
410	+8.5000e+001	+3.8000e+001	+2.8335e+001
411	+8.5000e+001	+4.0000e+001	+3.4733e+001
412	+8.5000e+001	+4.2000e+001	+4.4509e+001
413	+8.5000e+001	+4.4000e+001	+5.8012e+001
414	+8.5000e+001	+4.6000e+001	+7.5150e+001
415	+8.5000e+001	+4.8000e+001	+9.5116e+001
416	+8.5000e+001	+5.0000e+001	+1.0565e+002

Nilai Maksimum Tegangan Efektif pada tangki 2 dapat dilihat pada **Tabel L2.7**

Tabel L2.7 Nilai Maksimum Tegangan Efektif pada Tangki 2

Node	X Coordinate	Y Coordinate	Max EStress1

-	---Elapsed--	--Time----->	+1.0000e+000
401	+8.5000e+001	+0.0000e+000	+8.2286e+001

Lanjutan Tabel L2.7 Nilai Maksimum Tegangan Efektif pada Tangki 2

Node	X Coordinate	Y Coordinate	Max EStress I
-	---Elapsed--	--Time----->	+1.0000e+000
402	+8.5000e+001	+6.0000e+000	+8.4833e+001
403	+8.5000e+001	+1.2000e+001	+9.0693e+001
404	+8.5000e+001	+1.8000e+001	+9.8732e+001
405	+8.5000e+001	+2.4000e+001	+1.1014e+002
406	+8.5000e+001	+3.0000e+001	+1.2242e+002
407	+8.5000e+001	+3.2000e+001	+1.3104e+002
408	+8.5000e+001	+3.4000e+001	+1.3709e+002
409	+8.5000e+001	+3.6000e+001	+1.4317e+002
410	+8.5000e+001	+3.8000e+001	+1.4916e+002
411	+8.5000e+001	+4.0000e+001	+1.5477e+002
412	+8.5000e+001	+4.2000e+001	+1.5960e+002
413	+8.5000e+001	+4.4000e+001	+1.6318e+002
414	+8.5000e+001	+4.6000e+001	+1.6526e+002
415	+8.5000e+001	+4.8000e+001	+1.6599e+002
416	+8.5000e+001	+5.0000e+001	+1.6605e+002

Nilai Minimum Tegangan Efektif dapat dilihat pada **Tabel L2.8**

Tabel L2.8 Nilai Minimum Tegangan Efektif pada Tangki 2

Node	X Coordinate	Y Coordinate	Min EStress l
-	---Elapsed--	--Time----->	+1.0000e+000
401	+8.5000e+001	+0.0000e+000	+2.8769e+001

Lanjutan Tabel L2.8 Nilai Minimum Tegangan Efektif pada Tangki 2

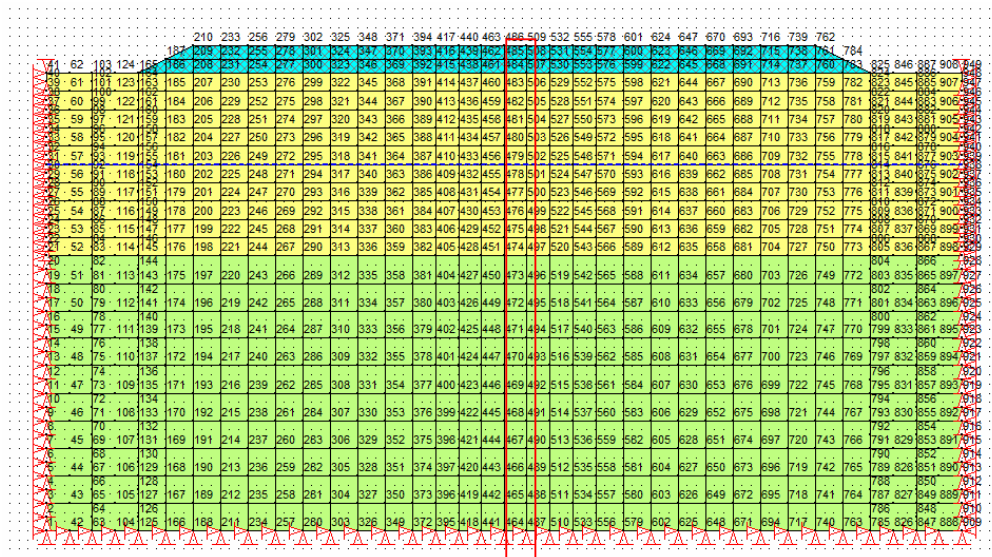
Node	X Coordinate	Y Coordinate	Min EStress l
-	---Elapsed--	--Time----->	+1.0000e+000
402	+8.5000e+001	+6.0000e+000	+2.4711e+001
403	+8.5000e+001	+1.2000e+001	+1.8064e+001
404	+8.5000e+001	+1.8000e+001	+1.3980e+001
405	+8.5000e+001	+2.4000e+001	+1.2482e+001
406	+8.5000e+001	+3.0000e+001	+1.9040e+001
407	+8.5000e+001	+3.2000e+001	+2.4622e+001
408	+8.5000e+001	+3.4000e+001	+2.3671e+001
409	+8.5000e+001	+3.6000e+001	+2.4800e+001
410	+8.5000e+001	+3.8000e+001	+2.8335e+001
411	+8.5000e+001	+4.0000e+001	+3.4733e+001
412	+8.5000e+001	+4.2000e+001	+4.4509e+001
413	+8.5000e+001	+4.4000e+001	+5.8012e+001
414	+8.5000e+001	+4.6000e+001	+7.5150e+001
415	+8.5000e+001	+4.8000e+001	+9.5116e+001
416	+8.5000e+001	+5.0000e+001	+1.0565e+002

LAMPIRAN 3

HASIL OUTPUT BEBAN TIMBUNAN

L3.1 Hasil output pada timbunan tahap 1

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 3 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L3.1**.



Gambar L3.1 Penomoran titik timbunan tahap 1

Nilai dari tekanan air pori pada timbunan tahap 1 dapat dilihat pada **Tabel L3.1**

Tabel L3.1 Nilai tekanan air pori pada timbunan tahap 1

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
464	+5.0000e+001	+0.0000e+000	+3.9228e+002

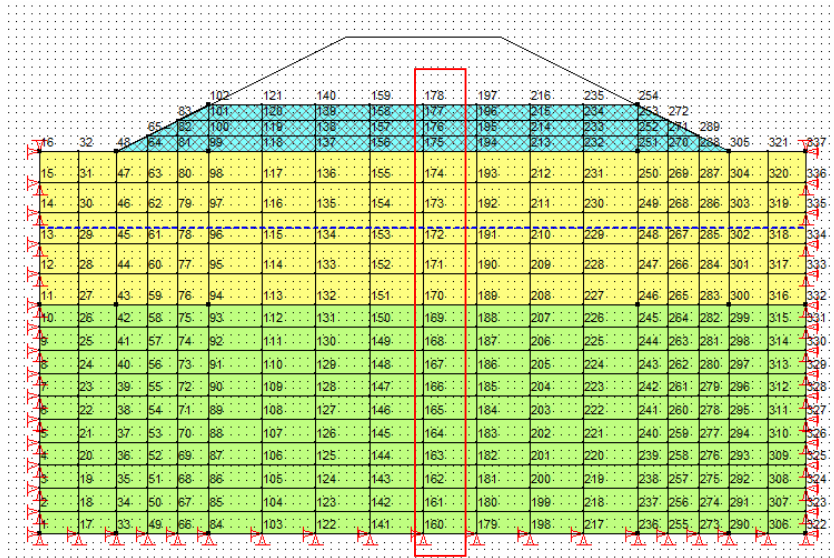
Lanjutan Tabel L3.1 Nilai tekanan air pori pada timbunan tahap 1

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
465	+5.0000e+001	+3.0000e+000	+3.6286e+002
466	+5.0000e+001	+6.0000e+000	+3.3344e+002
467	+5.0000e+001	+9.0000e+000	+3.0402e+002
468	+5.0000e+001	+1.2000e+001	+2.7460e+002
469	+5.0000e+001	+1.5000e+001	+2.4518e+002
470	+5.0000e+001	+1.8000e+001	+2.1575e+002
471	+5.0000e+001	+2.1000e+001	+1.8633e+002
472	+5.0000e+001	+2.4000e+001	+1.5691e+002
473	+5.0000e+001	+2.7000e+001	+1.2749e+002
474	+5.0000e+001	+3.0000e+001	+9.8070e+001
475	+5.0000e+001	+3.2000e+001	+7.8456e+001
476	+5.0000e+001	+3.4000e+001	+5.8842e+001
477	+5.0000e+001	+3.6000e+001	+3.9228e+001
478	+5.0000e+001	+3.8000e+001	+1.9614e+001
479	+5.0000e+001	+4.0000e+001	-1.0362e+000
480	+5.0000e+001	+4.2000e+001	-1.0843e+001
481	+5.0000e+001	+4.4000e+001	-9.8070e+000
482	+5.0000e+001	+4.6000e+001	-9.8070e+000

483	+5.0000e+001	+4.8000e+001	-9.8070e+000
484	+5.0000e+001	+5.0000e+001	-9.8070e+000
485	+5.0000e+001	+5.1500e+001	-9.8070e+000
486	+5.0000e+001	+5.3000e+001	-9.8070e+000

L3.2 Hasil output pada timbunan tahap 2

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 3 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L3.2**.



Gambar L3.2 Penomoran titik timbunan tahap 2

Nilai dari tekanan air pori pada timbunan tahap 2 dapat dilihat pada **Tabel L3.2**

Tabel L3.2 Nilai tekanan air pori pada timbunan tahap 2

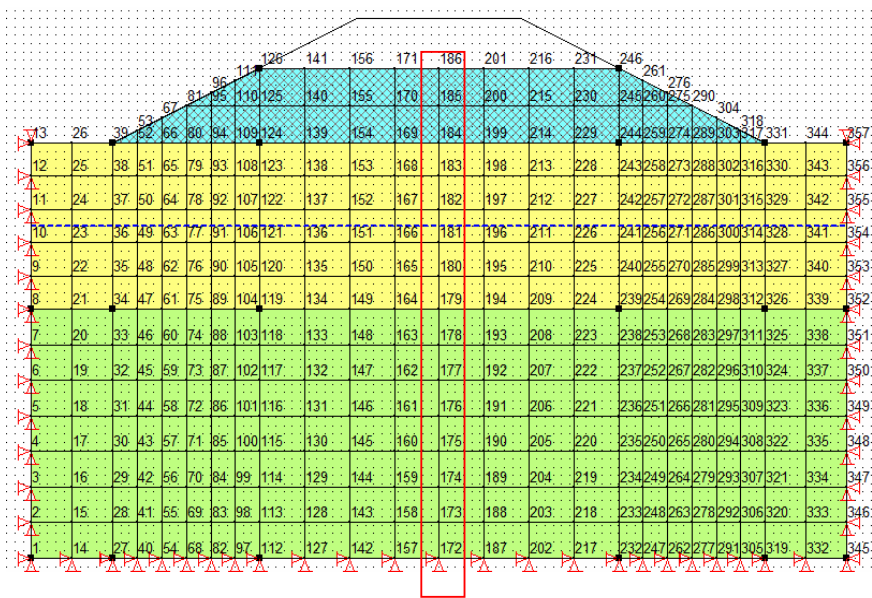
Node	X Coordinate	Y Coordinate	Pressure l
-	---Elapsed--	--Time----->	+1.0000e+000
160	+5.0000e+001	+0.0000e+000	+3.9228e+002

Lanjutan Tabel L3.2 Nilai tekanan air pori pada timbunan tahap 2

Node	X Coordinate	Y Coordinate	Pressure l
-	---Elapsed--	--Time----->	+1.0000e+000
161	+5.0000e+001	+3.0000e+000	+3.6286e+002
162	+5.0000e+001	+6.0000e+000	+3.3344e+002
163	+5.0000e+001	+9.0000e+000	+3.0402e+002
164	+5.0000e+001	+1.2000e+001	+2.7460e+002
165	+5.0000e+001	+1.5000e+001	+2.4518e+002
166	+5.0000e+001	+1.8000e+001	+2.1575e+002
167	+5.0000e+001	+2.1000e+001	+1.8633e+002
168	+5.0000e+001	+2.4000e+001	+1.5691e+002
169	+5.0000e+001	+2.7000e+001	+1.2749e+002
170	+5.0000e+001	+3.0000e+001	+9.8070e+001
171	+5.0000e+001	+3.4000e+001	+5.8842e+001
172	+5.0000e+001	+3.8000e+001	+1.9336e+001
173	+5.0000e+001	+4.2000e+001	-1.3674e+001
174	+5.0000e+001	+4.6000e+001	-9.8070e+000
175	+5.0000e+001	+5.0000e+001	-9.8070e+000
176	+5.0000e+001	+5.2000e+001	-9.8070e+000
177	+5.0000e+001	+5.4000e+001	-9.8070e+000
178	+5.0000e+001	+5.6000e+001	-9.8070e+000

L3.3 Hasil output pada timbunan tahap 3

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 3 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L3.3**.



Gambar L3.3 Penomoran titik timbunan tahap 3

Nilai dari tekanan air pori pada timbunan tahap 3 dapat dilihat pada **Tabel L3.3**

Tabel L3.3 Nilai tekanan air pori pada timbunan tahap 3

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
172	+5.0000e+001	+0.0000e+000	+3.9228e+002
173	+5.0000e+001	+4.2857e+000	+3.5025e+002
174	+5.0000e+001	+8.5714e+000	+3.0822e+002

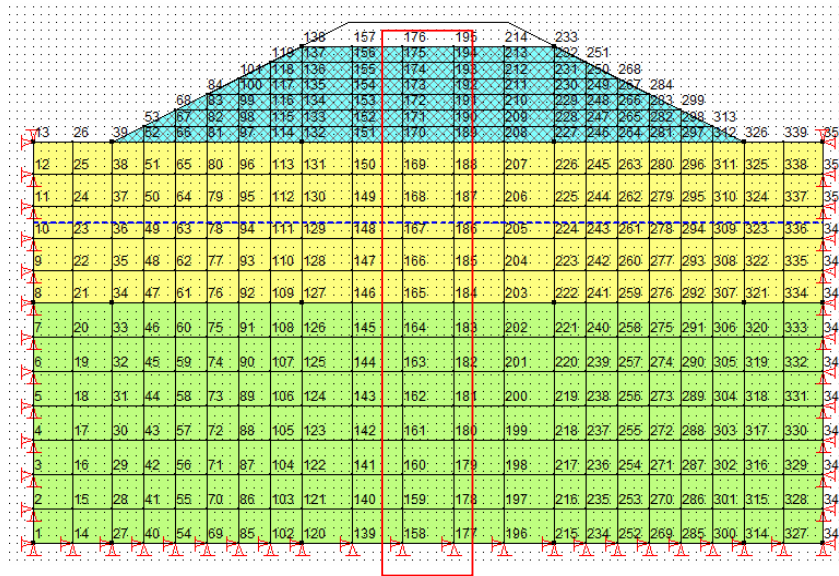
Lanjutan Tabel L3.3 Nilai tekanan air pori pada timbunan tahap 3

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
175	+5.0000e+001	+1.2857e+001	+2.6619e+002
176	+5.0000e+001	+1.7143e+001	+2.2416e+002
177	+5.0000e+001	+2.1429e+001	+1.8213e+002
178	+5.0000e+001	+2.5714e+001	+1.4010e+002
179	+5.0000e+001	+3.0000e+001	+9.8070e+001
180	+5.0000e+001	+3.4000e+001	+5.8842e+001
181	+5.0000e+001	+3.8000e+001	+1.9336e+001
182	+5.0000e+001	+4.2000e+001	-1.3674e+001
183	+5.0000e+001	+4.6000e+001	-9.8070e+000
184	+5.0000e+001	+5.0000e+001	-9.8070e+000
185	+5.0000e+001	+5.4500e+001	-9.8070e+000
186	+5.0000e+001	+5.9000e+001	-9.8070e+000

L3.4 Hasil output pada timbunan tahap 4

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 3 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar

tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L3.4**.



Gambar L3.4 Penomoran titik timbunan tahap 4

Nilai dari tekanan air pori pada timbunan tahap 4 dapat dilihat pada **Tabel L3.4**

Tabel L3.4 Nilai tekanan air pori pada timbunan tahap 4

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
158	+4.6800e+001	+0.0000e+000	+3.9228e+002
159	+4.6800e+001	+4.2857e+000	+3.5025e+002
160	+4.6800e+001	+8.5714e+000	+3.0822e+002
161	+4.6800e+001	+1.2857e+001	+2.6619e+002
162	+4.6800e+001	+1.7143e+001	+2.2416e+002
163	+4.6800e+001	+2.1429e+001	+1.8213e+002
164	+4.6800e+001	+2.5714e+001	+1.4010e+002

165	+4.6800e+001	+3.0000e+001	+9.8070e+001
166	+4.6800e+001	+3.4000e+001	+5.8842e+001

Lanjutan Tabel L3.4 Nilai tekanan air pori pada timbunan tahap 4

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
167	+4.6800e+001	+3.8000e+001	+1.9336e+001
168	+4.6800e+001	+4.2000e+001	-1.3674e+001
169	+4.6800e+001	+4.6000e+001	-9.8070e+000
170	+4.6800e+001	+5.0000e+001	-9.8070e+000
171	+4.6800e+001	+5.2000e+001	-9.8070e+000
172	+4.6800e+001	+5.4000e+001	-9.8070e+000
173	+4.6800e+001	+5.6000e+001	-9.8070e+000
174	+4.6800e+001	+5.8000e+001	-9.8070e+000
175	+4.6800e+001	+6.0000e+001	-9.8070e+000
176	+4.6800e+001	+6.2000e+001	-9.8070e+000
177	+5.3200e+001	+0.0000e+000	+3.9228e+002
178	+5.3200e+001	+4.2857e+000	+3.5025e+002
179	+5.3200e+001	+8.5714e+000	+3.0822e+002
180	+5.3200e+001	+1.2857e+001	+2.6619e+002
181	+5.3200e+001	+1.7143e+001	+2.2416e+002
182	+5.3200e+001	+2.1429e+001	+1.8213e+002
183	+5.3200e+001	+2.5714e+001	+1.4010e+002
184	+5.3200e+001	+3.0000e+001	+9.8070e+001
185	+5.3200e+001	+3.4000e+001	+5.8842e+001

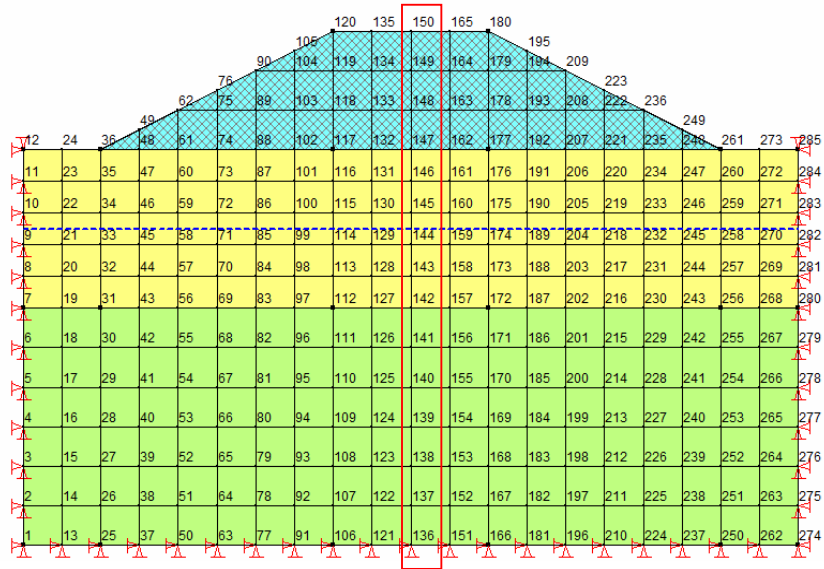
186	+5.3200e+001	+3.8000e+001	+1.9336e+001
187	+5.3200e+001	+4.2000e+001	-1.3674e+001

Lanjutan Tabel L3.4 Nilai tekanan air pori pada timbunan tahap 4

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
188	+5.3200e+001	+4.6000e+001	-9.8070e+000
189	+5.3200e+001	+5.0000e+001	-9.8070e+000
190	+5.3200e+001	+5.2000e+001	-9.8070e+000
191	+5.3200e+001	+5.4000e+001	-9.8070e+000
192	+5.3200e+001	+5.6000e+001	-9.8070e+000
193	+5.3200e+001	+5.8000e+001	-9.8070e+000
194	+5.3200e+001	+6.0000e+001	-9.8070e+000
195	+5.3200e+001	+6.2000e+001	-9.8070e+000

L3.5 Hasil output pada timbunan tahap 5

Untuk memudahkan melihat hasil output dari program Sigma/W, Geostudio maka pengolahan data dilakukan dalam bentuk tabel. Dalam lampiran 3 titik-titik yang ditinjau adalah titik-titik yang berada di bawah beban luar tepatnya ditengah-tengah bentang beban luar. Penempatan titik-titik tersebut dapat dilihat pada **Gambar L3.5**.



Gambar L3.5 Penomoran titik timbunan tahap 5

Nilai dari tekanan air pori pada timbunan tahap 5 dapat dilihat pada **Tabel L3.5**

Tabel L3.5 Nilai tekanan air pori pada timbunan tahap 5

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
136	+5.0000e+001	+0.0000e+000	+3.9228e+002
137	+5.0000e+001	+5.0000e+000	+3.4325e+002
138	+5.0000e+001	+1.0000e+001	+2.9421e+002
139	+5.0000e+001	+1.5000e+001	+2.4518e+002
140	+5.0000e+001	+2.0000e+001	+1.9614e+002
141	+5.0000e+001	+2.5000e+001	+1.4711e+002
142	+5.0000e+001	+3.0000e+001	+9.8070e+001
143	+5.0000e+001	+3.4000e+001	+5.8842e+001
144	+5.0000e+001	+3.8000e+001	+1.9336e+001

Lanjutan Tabel L3.5 Nilai tekanan air pori pada timbunan tahap 5

Node	X Coordinate	Y Coordinate	Pressure1
-	---Elapsed--	--Time----->	+1.0000e+000
145	+5.0000e+001	+4.2000e+001	-1.3674e+001
146	+5.0000e+001	+4.6000e+001	-9.8070e+000
147	+5.0000e+001	+5.0000e+001	-9.8070e+000
148	+5.0000e+001	+5.5000e+001	-9.8070e+000
149	+5.0000e+001	+6.0000e+001	-9.8070e+000
150	+5.0000e+001	+6.5000e+001	-9.8070e+000