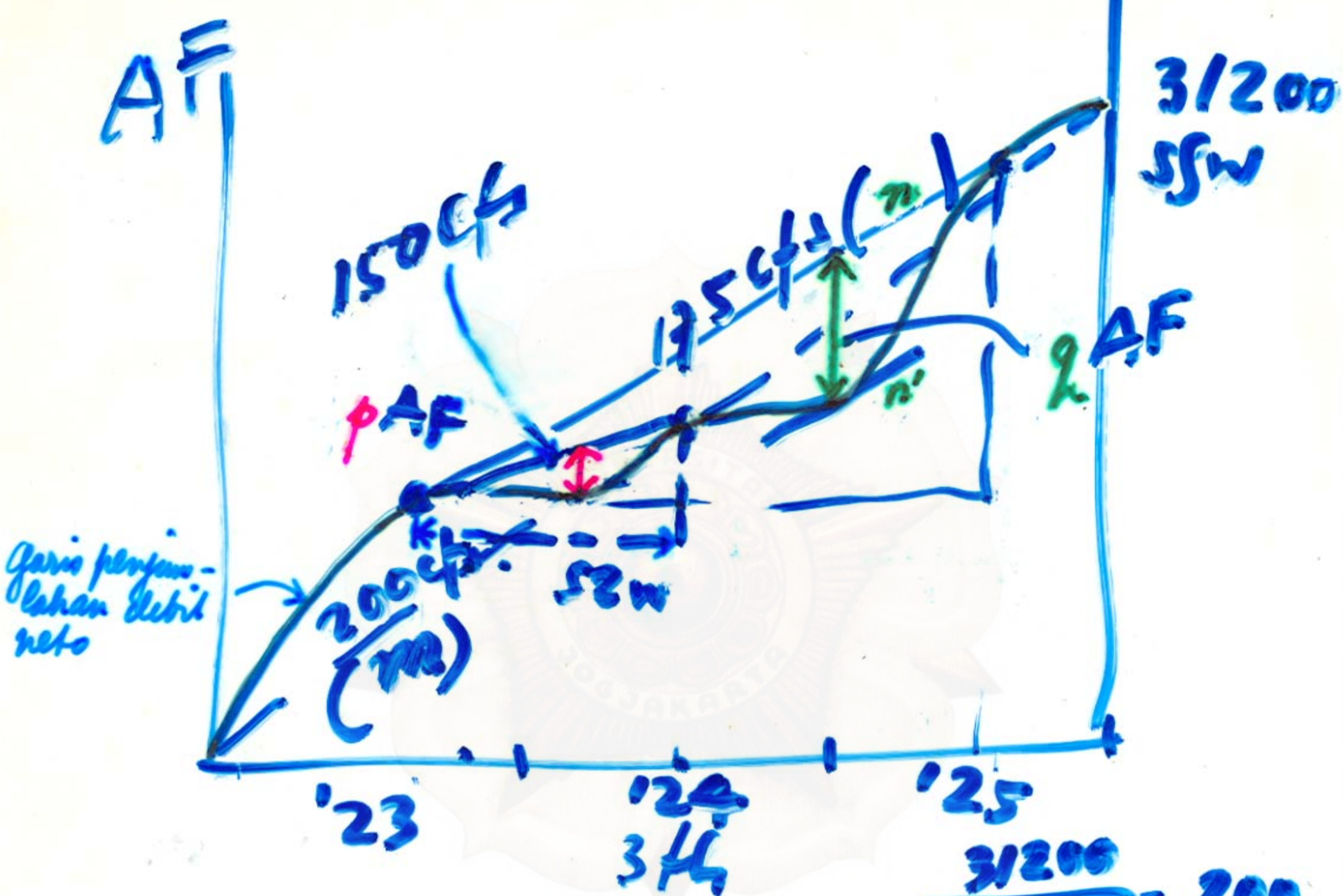
Mencari Volum Efektif Kolam Tando Tahunan.



$$\frac{3/200}{156} = 200 \text{ cfs } (m)$$

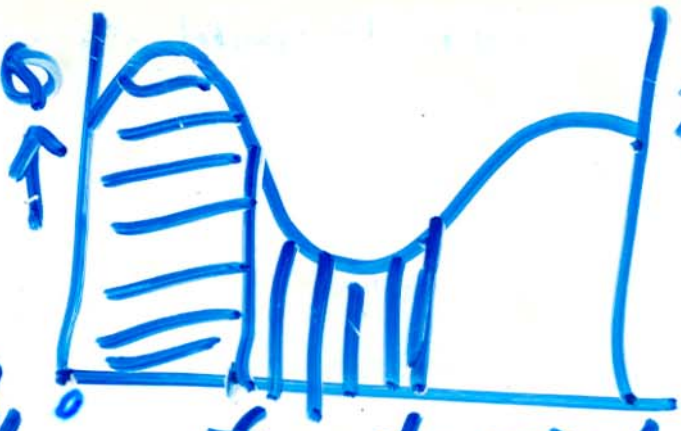
$$52 \times 3 = 156$$

Volum efektif KTH :

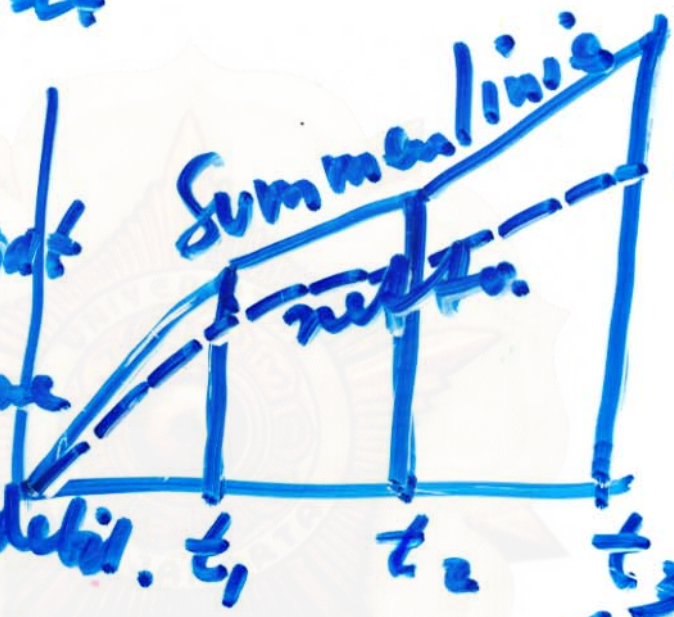
q AF berdasar 3 th terkering atau

p AF „ 1 th „

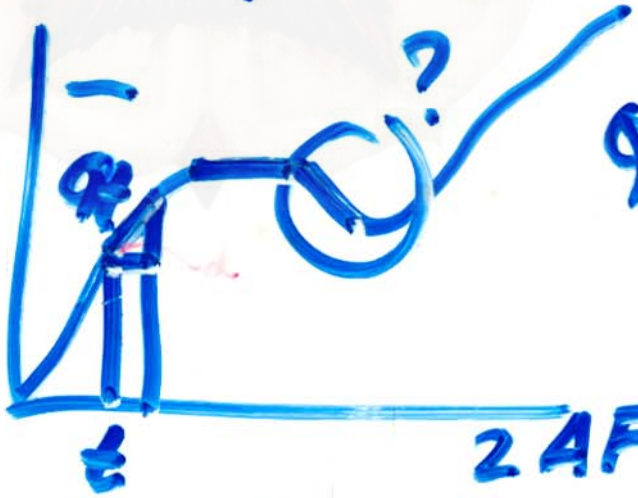
Grs debit Q



$$V_{t_1} = \int_0^{t_1} Q\,dt$$



1 cfs. day.
1 sfd



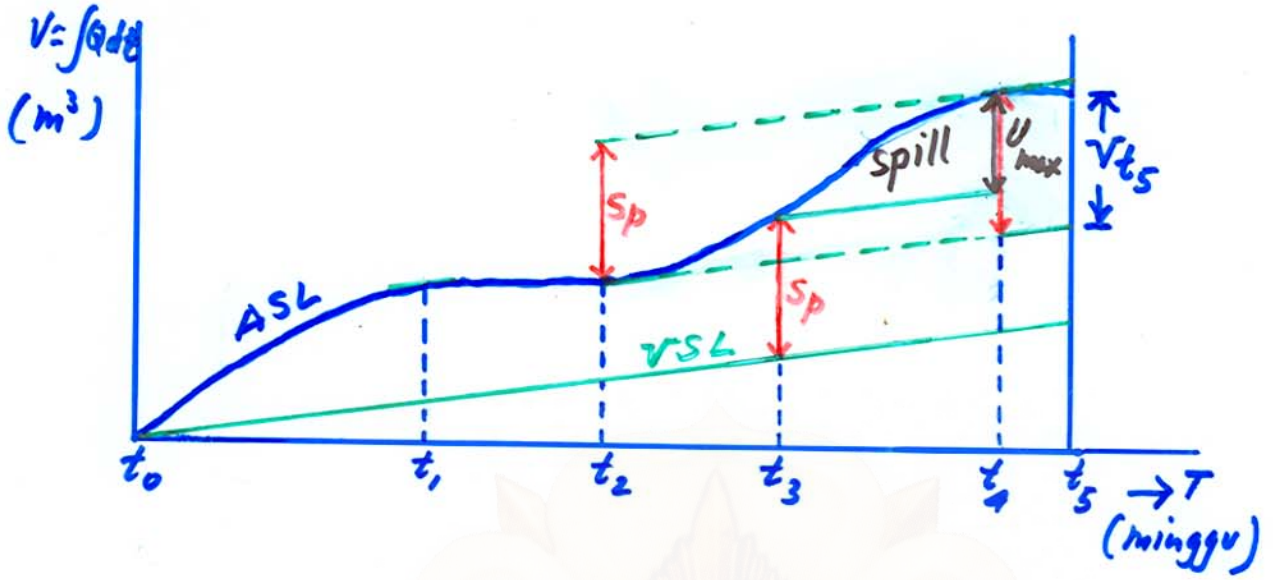
$$Q = \frac{dV}{dt} = 0$$

2 AF = 1 sfd

1 Ha. F. p acre. feet.

Peng. 1 day = $\frac{F.p}{730}$ sfd

A. Schocklitsch, "Handbuch des Wasserbaues", Bd II., Springer Verlag. Wien. 1952.



ASL = Abfluss Summen linie = Flow Mass Curve = Garis Penjumlahan Debit

VSL = Verbrauchs Summen linie = Garis Kebutuhan

Sp = Speicher = Storage = Kolam Tando

U = Uberlauf = Spill = Limpasan

Pada t_0 waduk kosong.

$t_0 \rightarrow t_1$: Muka air waduk naik

$t_1 \rightarrow t_2$: " " turun

$t_2 \rightarrow t_3$: " " naik

t_3 : Waduk penuh.

$t_3 \rightarrow t_4$: Terjadi pelimpasan (Spillway bekerja)
Waduk tetap penuh
Banyaknya air yang melimpas = U_{max}

$t_4 \rightarrow t_5$: Muka air waduk turun

t_5 : Banyaknya air di waduk = V_{t_5}