

2018-B

B3-1

(a) 破過曲線 (b) 破過 (c) 終末

$$(d) Q = \underbrace{t_B v A C_0}$$

$$(e) \frac{\rho_0 \rho_B A (z_T - z_a)}{2}$$

$$(f) \frac{\rho_0 \rho_B z_a A}{2}$$

$$\therefore Q = \rho_0 \rho_B A \left( z_T - \frac{z_a}{2} \right) = t_B v A C_0$$

$$t_B = \frac{\rho_0 \rho_B \left( z_T - \frac{z_a}{2} \right)}{v C_0} = \frac{\rho_0 \rho_B z_T}{v C_0} \left( 1 - \frac{z_a}{2z_T} \right)$$