**Annular Velocity (AV)**

Annular velocity (ft/min)

**Formula 1**

AV = pump output (bbl/min) ÷ annular capacity (bbl/ft)

Case warna biru diisi oleh user

Case : pump output = 12.6 bbl/min  
 annular capacity = 0.1261 bbl/ft

Setelah diklik “calculate” maka akan menghitung otomatis dan tampilannya muncul dibawahnya (warna kuning) tombol ‘calculate’ jadi ngeblur, warna hijau tetap dimunculkan dan warna kuning langsung hasilnya, **begitu seterusnya**. Angka di formula sebagai contoh untuk pengecekan aja.

Background pattern halaman ini sama ma yang lain.

**Calculate**

AV = 12.6 bbl/min ÷ 0,1261 bbl/ft

= 99.92 ft/min

**Formula 2**

Where ;

Q = circulation rate (gpm)  
Dh = inside diameter of casing or hole size (inch)  
Dp = outside diameter of pipe, tubing or collars (inch)

Case : pump output = 530 gpm  
 hole size = 12-l/4 inch  
 pipe OD = 4-1/2 inch

**Calculate**

***Halaman ini sebagai contoh untuk halaman formula selanjutnya***

***Kalo masih ada kata “Sample Case” tolong diganti dengan kata “Case”***

**Formula 3**

Case : pump output = 12.6 bbl/min  
 hole size = 12-1/4 inch  
 pipe OD = 4-1/2 inch

**Calculate**

**Annular Velocity (ft/sec)**

Case : pump output = 12.6 bbl/min

Hole size = 12.25 inch

Pipe OD = 4.5 inch

**Calculate**

**Pump Output (gpm) required for a desired annular ve1ocity (ft/min)**

Where ;

AV = desired annular velocity (ft/min)  
Dh = inside diameter of casing or hole size (inch)  
Dp = outside diameter of pipe, tubing or collars (inch)

Case : desired annular velocity = 120 ft/min  
 hole size = 12.25 inch  
 pipe OD = 4.5 inch

**Calculate**

**Strokes per minute (SPM) required for a given annular velocity**

Case : annuular velocity = 120 ft/min  
 annular capacity = 0.1261 bbl/ft  
 Dh = 12.25 inch  
 Dp = 4.5 inch

**Calculate**