**Pressure Gradient**

**Pressure gradient (psi/ft) using mud weight (ppg)**

psi/ft = mud weight (ppg) x 0.052

Case : 12.0 ppg fluid

psi/ft = 12.0 ppg x 0.052

= 0.624

**Pressure gradient (psi/ft) using mud weight (lb/ft3)**

psi/ft = mud weight (lb/ft3) x 0.006944

Case : 100 lb/ft3 fluid

psi/ft = 100 lb/ft3 x 0.006944

= O.6944

**Or**

psi/ft = mud weight (lb/ft3) ÷ 144

Case : 100 lb/ft3 fluid

psi/ft = 100 lb/ft3 x 144

= O.6944

**Pressure gradient (psi/ft) using mud weight specific gravity (SG)**

psi/ft = mud weight (SG) x O.433

Case : 1.0 SG fluid

psi/ft = 1.0 SG x 0.433

= 0.433

**Convert pressure gradient (psi/ft) to mud weight (ppg)**

ppg = pressure gradient (psi/ft) ÷ 0.052

Case : 0.4992 psi/ft

ppg = 0.4992 psi/ft ÷ 0.052

= 9.6

**Convert pressure gradient (psi/ft) to mud weight (lb/ft3)**

lb/ft3 = pressure gradient (psi/ft) ÷ 0.006944

Case : 0.6944 psi/ft

lb/ft3 = 0.6944 psi/ft ÷ 0.006944

= 100

**Convert pressure gradient (psi/ft) to mud weight (SG)**

SG = pressure gradient (psi/ft) ÷ 0.433

Case : 0.433 psi/ft

SG = 0.433 psi/ft ÷ 0.433

= l.0