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Affected Publication: API Recommended Practice 14B, *Design, Installation, Repair and Operation of Subsurface Safety Valve Systems*, Fifth Edition, October 2005

ERRATA

Page 26, Section E.1.7, replace the content of this section with the following:

E.1.7 Conduct leakage test and document results. For gas wells, flow rates can be computed from pressure build-up by the following formulae.

$$q = 2{,}84 \times 10^{3} \left(\Delta \frac{p}{Z} \right) \left(\frac{1}{t} \right) \left(\frac{V}{T} \right) \qquad \text{(SI units)}$$

$$q = 35{,}37 \left(\Delta \frac{p}{Z} \right) \left(\frac{1}{t} \right) \left(\frac{V}{T} \right) \qquad \text{(USC units)}$$

where

$\left(\Delta \frac{p}{Z} \right)$ is the final pressure p_f divided by final Z_f minus initial pressure p_i divided by initial Z_i;

q is the leakage rate, m^3/min (SCF/min);

p is the pressure, in MPa (psi);

Z is the compressibility factor;

t is the build-up time, in min, to reach a stabilized pressure;

V is the volume of the tubing string above the SSSV, in m^3, (ft^3);

T is the absolute temperature at the SSSV, in °C + 273 (°F + 460).

For low-pressure application, this formula may be simplified as follows:

$$q = \frac{9{,}68 \ \ \Delta p \ \ V}{t} \qquad \text{(SI units)}$$

$$q = \frac{6{,}67 \times 10^{-2} \ \ \Delta p \ \ V}{t} \qquad \text{(USC units)}$$