

Gas Meter Volume Error Worksheet

Well: _____
 (a) Elevation: _____ (feet MSL)

Lease: _____
 (b) Atmospheric Pressure: _____ (psi)

Date: _____

$$14.73 - \frac{0.496x(a)}{1000}$$

A. Find "Normal" Operating Range

| Chart Recorder Data: | | | Chart Type: | | | |
|----------------------|-----|----------------|-------------|----------------|---------------|---------------|
| DP Range | (c) | (inches water) | Scale: | _____ Sq. Root | _____ Percent | _____ Direct* |
| LP Range | (d) | (psi) | Scale: | _____ Sq. Root | _____ Percent | _____ Direct* |
| Temp. Range | (e) | (°F) | Scale: | _____ Sq. Root | _____ Percent | _____ Direct* |

| Chart Readings: | Roots | Squared = | Percent | x Range = | Direct |
|---------------------|-------|-----------|---------|---------------|-----------|
| Average DP (red) | | Squared = | | x (c) _____ = | (f) (in) |
| Average LP (blue) | | Squared = | | x (d) _____ = | (g) (psi) |
| Average Temp. (grn) | | Squared = | | x (e) _____ = | (h) (°F) |

Is atmospheric pressure included in LP reading?

_____ Yes ---> Gauge LP = Average LP (g) = _____ - atmos. press. (b) _____ =

_____ No ---> Gauge LP = Average LP (g) = ----->

(j) (psig)

B. Get "As Found" Readings at Normal Operating Range

| | Applied | Indicated (As Found) |
|----------------------------------|---|---|
| Diff. Press. (h _w) | (k*) (in.) | (p) (in.) |
| Line Press. (P _f) | (m)* (psig) | (q) (psig) |
| Temperature | (n)* (°F) | (r) (°F) |
| F _{tf} (Table D3) | (s) | (t) |
| Line Press. (P _f) | = (m) _____ + (b) _____ = (u) _____ (psia) | = (q) _____ + (b) _____ = (v) _____ (psia) |
| F _{tf} $\sqrt{h_w P_f}$ | (s) _____ $\sqrt{(k) \text{ } x(u) \text{ } }$ = (w) _____ | (t) _____ $\sqrt{(p) \text{ } x(v) \text{ } }$ = (x) _____ |

*These points should be close to the "normal" values found in part A: (f), (j), and (h), respectively

C. Calculate % Error

$$\text{Error} = \frac{(x) \text{ } - (w) \text{ } }{(w) \text{ } } \times 100 = \text{ } \%$$