## Water Vapor (Pipeline) $H_2O$ No. N10-120-20


| | Extended Range | Standard Range | Extended Range |
|---|---|---|---|
| Range (lbs/MMCF) | 3 - 20 | 6 - 40 | 12 - 80 |
| No. of Pump Strokes | 2 | 1 | 0.5 |
| Sample Volume (mL) | 200 | 100 | 50 |
| Sample Time (min) | 2 x 1.5 | 1.5 | 1 |
| Correction Factor | 0.45 | 1 | 2.3 |

Precision (Relative Standard Deviation)*: ≤±12%
Linearity with No. of Pump Strokes: r2 = 0.994
Temperature Range: 0 - 40° C (32 - 104° F)

Temp (°C/°F) 0/32 10/50 25/77 40/104
Corr. Factor 1.3 1.1 1.0 0.74
Storage Life: 2 years in darkness at 5 - 25° C (40 - 77° F) Refrigeration preferred
Color Change: Yellow→Dark Green**
Reaction Principle: $H_2O + Mg(ClO_4)_2 \rightarrow Mg(ClO_4)_2 \cdot H_2O$

| Cross-sensitivity Substance | Concentration (ppmv) | Reading* (lbs/ MMCF) |
|---|---|---|
| $CH_4$ | 100% | 0 |
| CO | 200 | 0# |
| $CO_2$ | 10% | 0# |
| $SO_2$ | 1500 | 0# |
| $H_2S$ | 2000 | <3# |
| $NH_3$ | 250 | 35 |
| HCl | 300 | 0# |
| Methanol | 80 | 0‡ |
| Gasoline | saturated | 0 |
| Heptane | saturated | 0 |
| Ethylene glycol | saturated | 0 |
| Triethylene glycol | saturated | 0 |
| Toluene | saturated | 0 |

* Data based on NAGCO pumps and tubes used in standard range.
# No interference in mixtures with water vapor. ‡ No response below 80 ppm. Light green stain when methanol is above 80 ppm, 340 ppm alone reads ~30 lbs/MMCF. Water can be measured in a mixture with methanol by reading the dark green stain only, ignoring the light green methanol stain beyond the dark green endpoint.
**Note: Color tends towards purple as temperature decreases.
Other Possible Interferences: Amines, alcohols; no effect of 500 ppm PH