Water Vapor (Pipeline) H_2O No. H-10-120-10

	Extended Range	Standard Range	Extended Range
Range (lbs/MMCF)	1 - 5	2 - 10	4 - 20
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min) in air	4 x 1.5 min	2 x 1.5 min	1.5 min
(sec) in natural gas	4 x 45 sec	2 x 45 sec	45 sec
Correction Factor	0.51	1	2.22

Precision (Relative Standard Deviation)*: ≤±12%
Linearity with No. of Pump Strokes: $r^2 = 0.99$
Temperature Range: 0 - 40°C (32 - 104°F)

Temp (°C/°F)	0/32	10/50	23/73	40/104
Corr. Factor	1.1	1.0	1.0	0.9

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F) Refrigeration preferred.
Color Change: Yellow → 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
Propane (C_3H_8)	10000	≤2
Isobutylene	10000	0
Hexanes	3000	0
CO	200	0
CO_2	3000	0
SO_2	1500	0
H_2S	2000	~1
NH_3	100	entire tube
HCl	300	0
Ethylene glycol	saturated	0
Triethylene glycol	saturated	0
Methanol	50	0‡
Toluene	400	~1

* Data based on Honeywell pumps and tubes used in standard range.
‡ Forms light green stain when methanol is above 70 ppm. Water can be measured in a mixture with methanol by reading the dark green stain only, ignoring the light green methanol stain beyond dark green end point. See Technical Note on page 96 for pictures.

Other Possible Interferences: Amines, alcohols. No response to heptanes, octanes as present in "rich" natural gas or commonly called "condensate."