METS Sensor #1 **s/n** **T41-E212**
(WITHOUT Pump)

Type: Methane Sensor METS

Serial number: **T41-E212**

$$c = \exp\left[2{,}128 * \ln\left\{\left(0{,}682 + 1{,}379 * \exp\frac{-V_t}{1{,}352}\right) * \left(\frac{1}{V_{CH4}} - \frac{1}{-0{,}321 + 10{,}335 * \exp\frac{-V_t}{1{,}030}}\right)\right\}\right]$$

$$t = (V_t * 22{,}06) - 4{,}40$$

O_2 correction:

$$c_{CH4}(corr) = \left(-0{,}040 + 0{,}068 * \exp\frac{c_{O2}}{36{,}701}\right) * c_{CH4}$$

c_{CH4} = methane concentration [µmol/l]
t = gas temperature [°C]
V_{CH4} = methane voltage [V]
V_t = temperature voltage [V]
c_{O2}= O_2 concentration [%]

Methane range:	10 nmol/l - 1 µmol/l
Temperature range:	10 – 30 °C

		true [V]		a	b
Conc[mV]:	**2300**	0,3356	V_{CH4}	-2,028	5
Temp[mV]:	**2000**	0,9459	V_t	-2,0239	4,9937

c [µMol/l]	**17,23**
temp [°C]	**16,47**