MEDOR: special application

Objective: H2S and THT analysis in a matrix with 10% of H2.

The analyser is calibrated on DMS compound (internal standard) in middle amplification from DMS at 33.7 ppb (+/-8%)

The response factors are (for the same amplification):

Rf (DMS) =1 Rf (H2S) = 2.22 Rf (THT) = 0.35

The **H2S** compound comes from a permeation tube heated and swept by zero air.

The **THT** compound comes from a cylinder diluted in zero air.

Analytical conditions

Packed columns at 40°C – 1/8" Teflon – length: 190 cm + 40 cm

Carrier gas: N2 at ≈ 5 ml/min – Pressure: 652 hPa

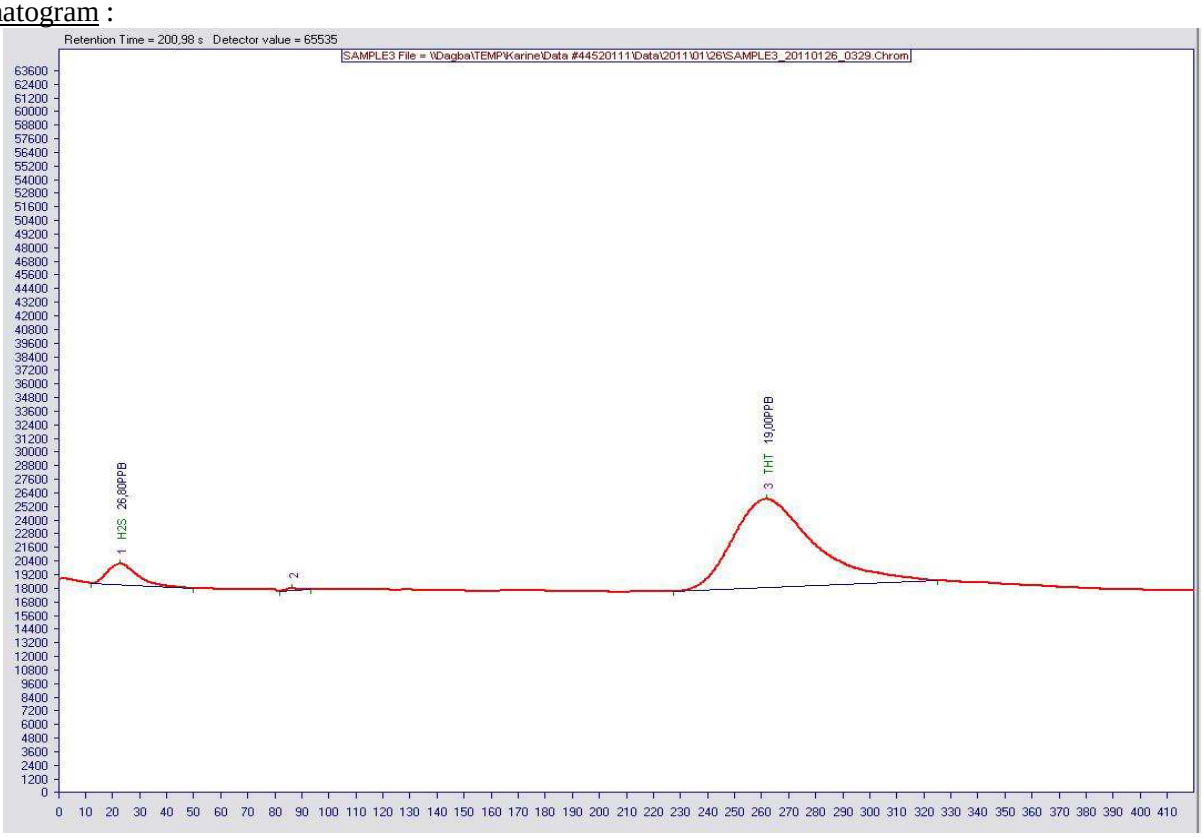
Loop: 1 ml - Sampling flow: - 100 ml/min

Analysis cycle: 600 s – Acquisition: 450 s – Amplification: high (3)

Detector: wet cell.

1. H2S at 26,8 ppb and THT à 19.6 ppb (+/- 10%) in a matrix with 10.2% H2

Chromatogram :



Information and operating conditions

Analyser :

Serial Number : #44520111
Owner : AIR LIQUIDE
Location : JOUY EN JOSAS

Operating conditions :

Description : Sample analysis-A=3
Method Name : SAMPLE3 Subtances Table Name : SOUFRE3

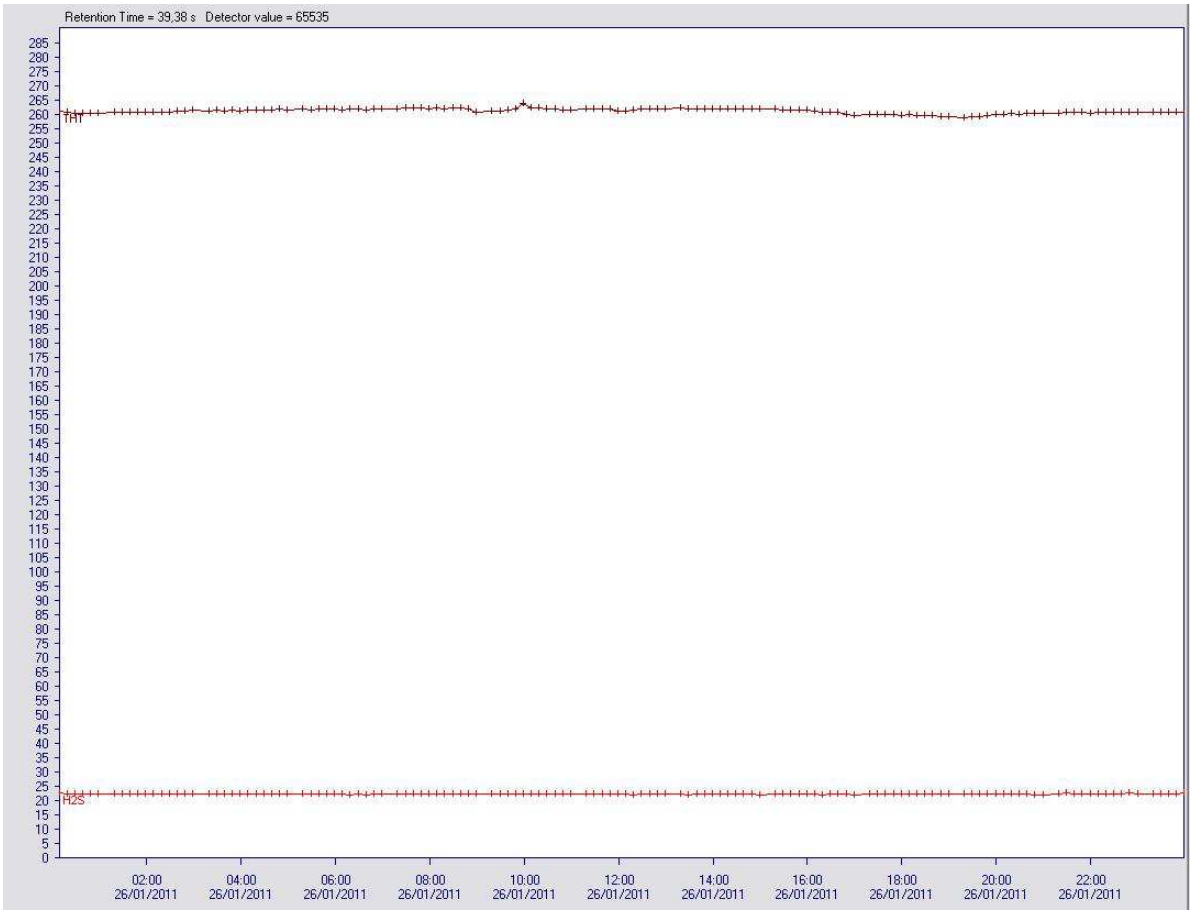
Sampling :
Tube Number : 1 Duration : 0 s Volume : 1,0 ml Date : 26/01/2011 03:29:00

Detector :
Amplification : 3-High Sample Rate : 6 per second

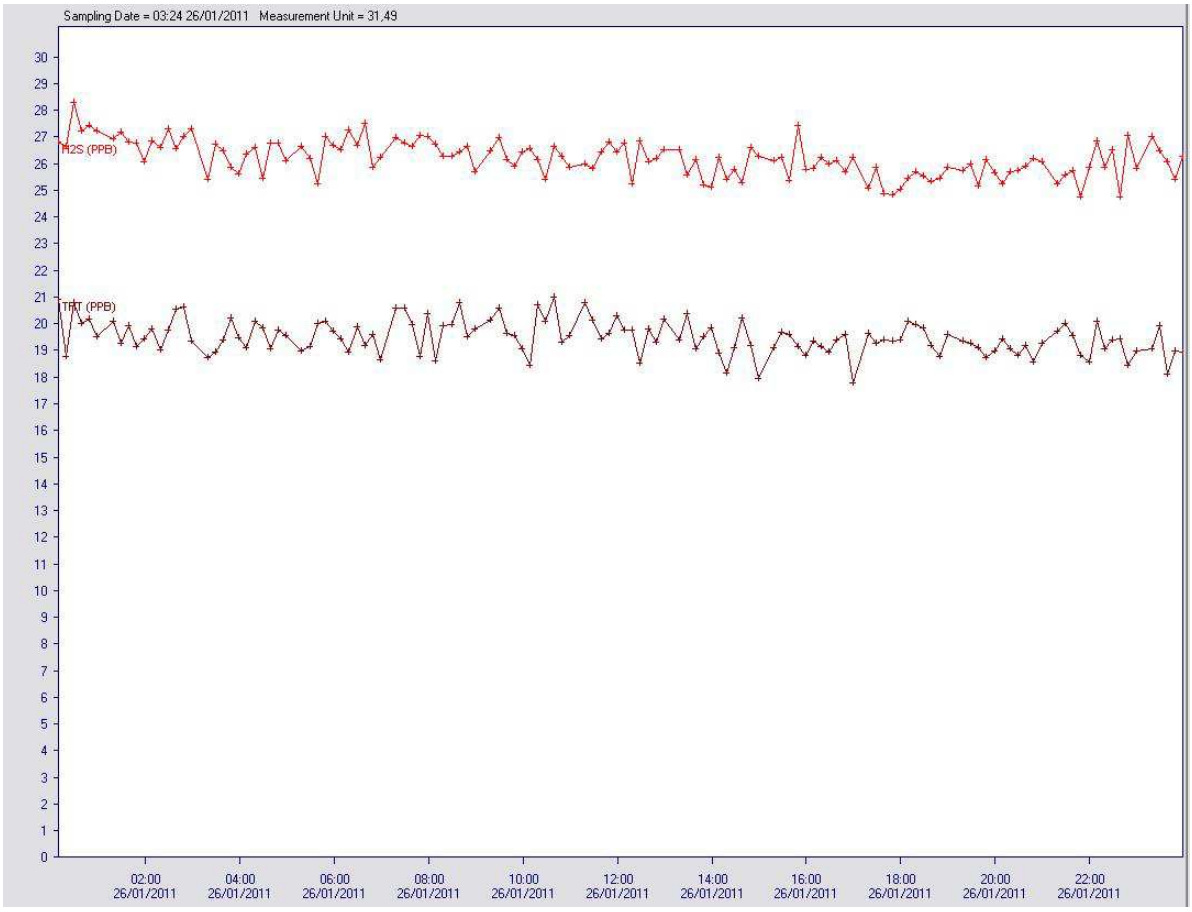
Peak List

Substance	Result	Unit	Start	R.Time	Max	Stop	Area	Type
H2S	26,76	PPB	12,17	22,83	20239,00	50,00	23233,00	ST_E
THT	18,97	PPB	227,50	261,83	25934,00	325,17	2,7034E5	ST_E

2. 24 hours trend on standard gas



Trend on retention times in seconds



Trend on concentrations in ppb