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Application Data Sheet

No.13

System Gas Chromatograph

Town Gas Analysis
Nexis GC-2030TGA1
GC-2014TGA1

The system enables quantitative and qualitative analysis of He, H2, O2, N2, CO, CO2 and C1to C3 in municipal gas. A fixed volume of gaseous sample is loaded into the GC and individual components of the sample are identified using two thermal conductivity detectors (TCD). The system is equipped with three automated valves. LabSolutions GC workstation system handles all aspects of GC control, automation, and data handling.

Analyzer Information

System Configuration:
Three valves / six packed columns with Dual TCD detectors

Sample Information:
H_2, O_2, N_2, CO, CO_2, C_1, C_2, C_3

Concentration Range:

No.	Name of Compound	Concentration Range	
		Low Conc.	High Conc.
1	He	0.01%	10%
2	H2	0.01%	10%
3	O2	0.01%	50%
4	N2	0.01%	50%
5	CO	0.01%	10%
6	CH4	0.01%	90%
7	CO2	0.01%	10%
8	C2H2	0.01%	40%
9	C2H4	0.01%	40%
10	C2H6	0.01%	40%
11	C3H8	0.01%	40%

Detection limits may vary depending on the sample.
Please contact us for more consultation.

System Features

・Dual channel with packed columns
・About 20 minutes analysis time
・Calorific value software is available
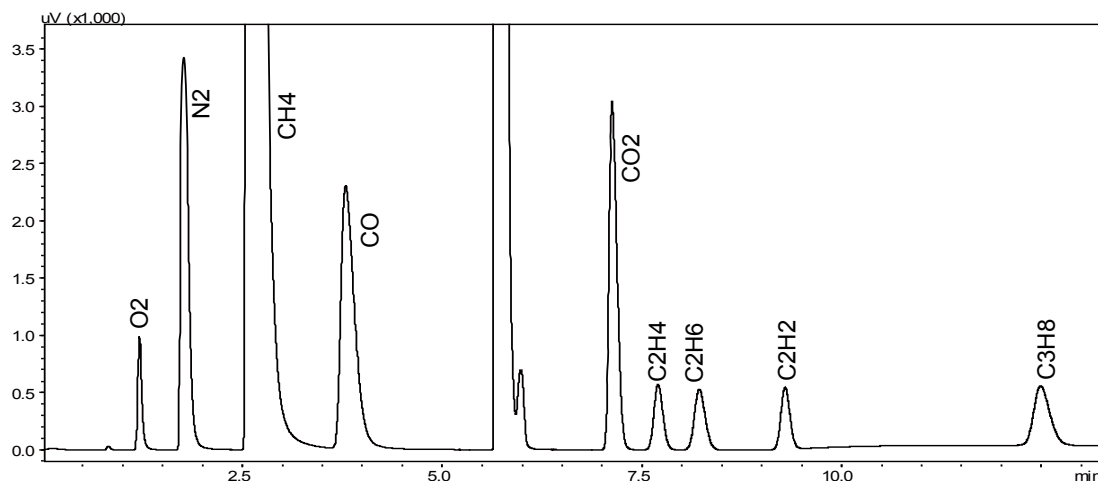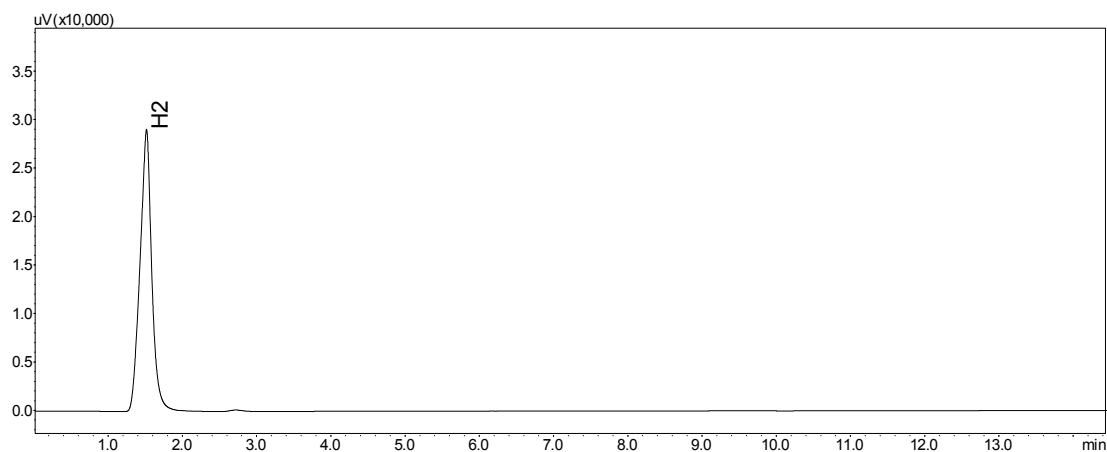・Full range capability for H_2

Typical Chromatograms

Fig. 1 Chromatogram of TCD-1

Fig. 2 Chromatogram of TCD-2

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