

Application Data Sheet

No.54

System Gas Chromatograph

Permanent Gas with CO/CO₂ Gas Analysis System Nexis GC-2030PCC2 GC-2014PCC2

The system enables a quantitative and qualitative analysis of O₂, N₂, CO and CO₂, in municipal gas. A fixed volume of gas sample is introduced into the chromatographic system by loop sample injection and individual components of the sample are identified by the thermal conductivity detector (TCD). Using a backflush column, H₂O and C₃+ are vented out of the system. The valve timing allows the O₂, N₂, CH₄ and CO as a mixed peak to elute to an MS-13X for separation while the CO₂ is separated by the P-Q and detected by TCD-2014. Lab Solution chromatography workstation system handles all aspects of GC control, automation, and data handling.

Analyzer Information

System Configuration:

One 10-port valve and one 6-port valve / four packed columns with one TCD detector

Sample Information:

O₂, N₂, CO, CO₂, CH₄

Concentration Range:

No.	Name of Compound	Concentration Range		Detector
		Low Conc.	High Conc.	
1	O ₂	0.01%	50%	TCD-1
2	N ₂	0.01%	50%	TCD-1
3	CO	0.01%	10%	TCD-1
4	CH ₄	0.01%	90%	TCD-1
5	CO ₂	0.01%	10%	TCD-1

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

System Features

- Versatile software for operate the system easily
- One TCD channel
- Good repeatability

Typical Chromatograms

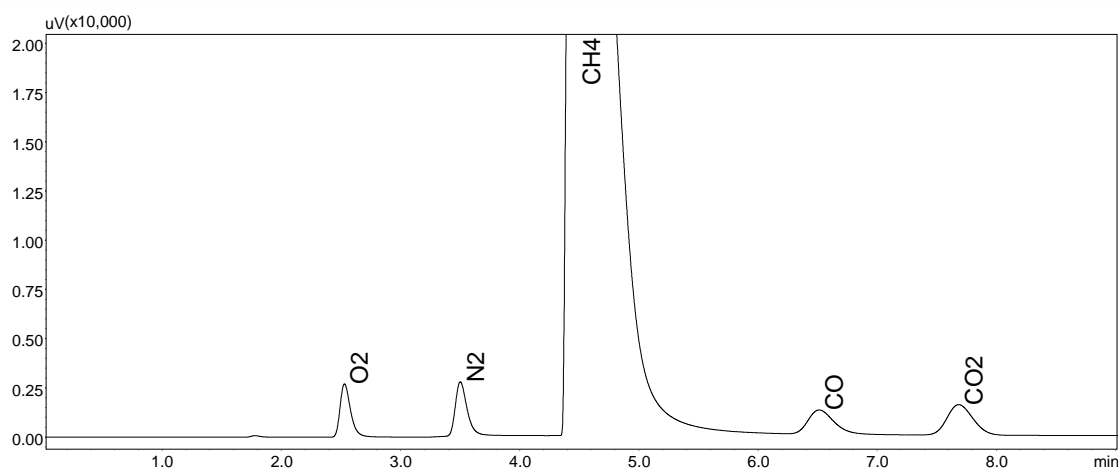


Fig. Chromatogram of TCD

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