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Excellence in Science

Application Data Sheet **No.**61	**System Gas Chromatograph** **NGA analysis with ISO6974-4** **Nexis GC-2030ISO6974-4** **GC-2014ISO6974-4**

This method is for determining the chemical composition of natural gases and similar gaseous mixtures within the composition range shown in the specification sheet. This test method provides data for calculating physical properties of the sample, such as heating value and relative density, or for monitoring the concentrations of one or more of the components in a mixture. A total of 1 valves and 2 columns are applied in this GC system. Sample is introduced into the sample loop for determination. Using a pre-column, C6+ components are back-flushed as a single peak. The valve timing then allows C1-C5, N2, CO2 to be eluted to TCD through DC-200 in that order. The final analysis time is approximately 22 minutes. The system includes LabSolution workstation software and BTU and Specific Gravity calculation software.

Analyzer Information

System Configuration:
One valve / two packed columns with one TCD detector

Sample Information:
Permanent gas, C1-C6

Concentration Range:

No.	Name of Compound	Concentration Range		Detector
		Low Conc.	High Conc.	
1	N2	0.001%	15.0%	TCD-1
2	CH4	75.0%	100.0%	TCD-1
3	CO2	0.001%	10.0%	TCD-1
4	C2H6	0.001%	10.0%	TCD-1
5	C3H8	0.001%	3.0%	TCD-1
6	i-C4H10	0.001%	1.0%	TCD-1
7	n-C4H10	0.001%	1.0%	TCD-1
8	Neo-C5H12	0.001%	0.5%	TCD-1
9	i-C5H12	0.001%	0.5%	TCD-1
10	n-C5H12	0.001%	0.5%	TCD-1
11	C6+	0.001%	0.2%	TCD-1

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

System Features

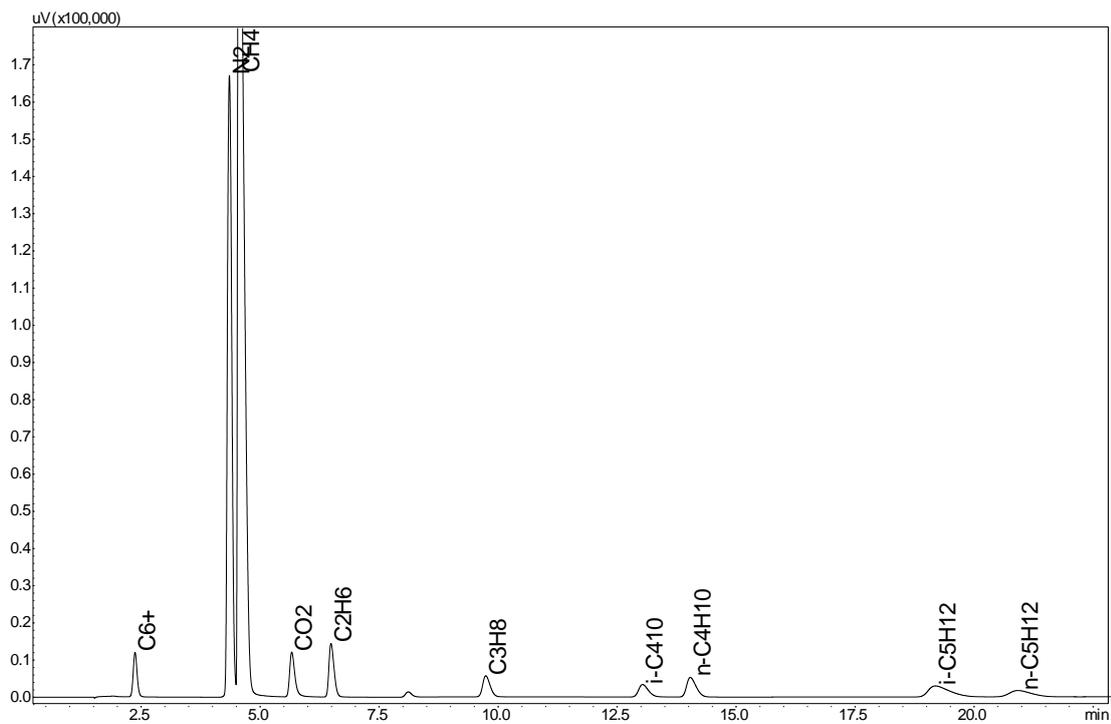・Versatile software easy GC system operation
・One TCD channel
・Good repeatability

Typical Chromatograms

uV(x100,000)

Fig. 2 Chromatogram of TCD

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