

# Application Data Sheet

No. 63

## System Gas Chromatograph

### Trace H<sub>2</sub> Analysis System Nexis GC-2030TH2 GC-2014TH2

The system enables a quantitative and qualitative analysis of H<sub>2</sub> in municipal gas. A total of 1 valve and 2 columns are used in this GC system. N<sub>2</sub> is used as the carrier gas. Sample is introduced into one sample loop for determination. Using a pre-column, C<sub>2</sub>-C<sub>3</sub> components are back-flushed. The valve timing then allows O<sub>2</sub> and N<sub>2</sub> to directed to molecular sieve column for separation and TCD for detection. The analysis time is approximately 4 minutes. LabSolutions chromatography workstation system handles all aspects of GC control, automation, and data handling.

#### Analyzer Information

##### System Configuration:

One valve / Two packed columns with one TCD detector

##### Sample Information:

H<sub>2</sub>

##### Methods met:

ASTM-D2504

##### Concentration Range:

| No. | Name of Compound | Concentration Range |            | Detector |
|-----|------------------|---------------------|------------|----------|
|     |                  | Low Conc.           | High Conc. |          |
| 1   | H <sub>2</sub>   | 5ppm                | 500ppm     | TCD-1    |

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

#### System Features

- 5 minutes analysis for H<sub>2</sub> analysis can be carried out
- Single TCD channel
- Good repeatability

#### Typical Chromatograms

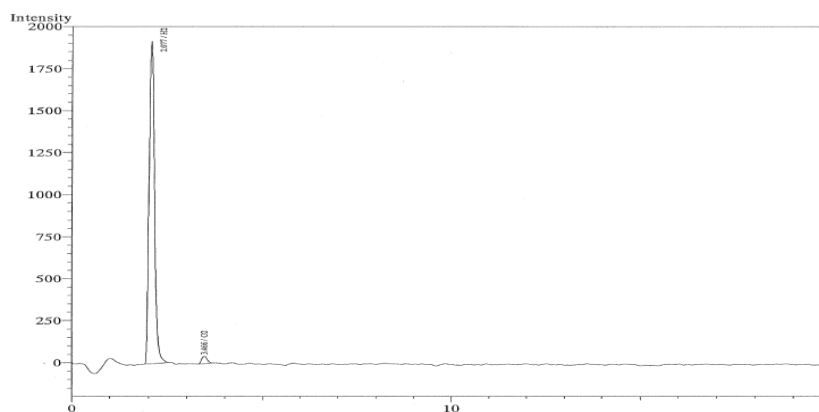


Fig. Chromatogram of TCD

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