

## Multipurpose Gas Chromatograph

The Multipurpose GC can be used to analyse N<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>S, CO<sub>2</sub>, C<sub>1</sub> - C<sub>36+</sub>, C<sub>10+</sub> with PNA or other end components depending on analysis requirement, in natural gas and C<sub>1</sub> - C<sub>36+</sub>, C<sub>10+</sub> with PNA or other end component depending on analysis requirement in hydrocarbon liquid.

The combined GC was made to improve the overlap between components in gas and oil, and to be able to adjust to changing analysis requirements.

Two different ovens is used, one for the permanent gases and the light components and one for the higher hydrocarbons. The oven for the higher components has a maximum temperature of 350°C.

A pre column is used to avoid heavy components into the analysis column during C<sub>10+</sub> analysis. This cut point on the pre column can be adjusted or omitted depending on the analysis requirement.

This solution prevents problems with cross contamination and temperature compatibility and gives the same or better performance as two stand alone systems.

One of the advantages with the combined GC is that the heavier components in gas have the same separation and detection as the hydrocarbons from the liquid, this give improved uncertainty for the combined fluid composition.



### Technical Specifications:

HP 6890 GC  
2 separate ovens  
FID  
TCD  
Columns:  
HP-1  
HP-PONA  
Poraplot Q  
Molsieve  
Split injector  
Heated sampleloops

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