# Thermo Scientific
# Gas Chromatograph Analyzers
## Natural Gas Analyzer for GPA 2186

## Product Spotlight

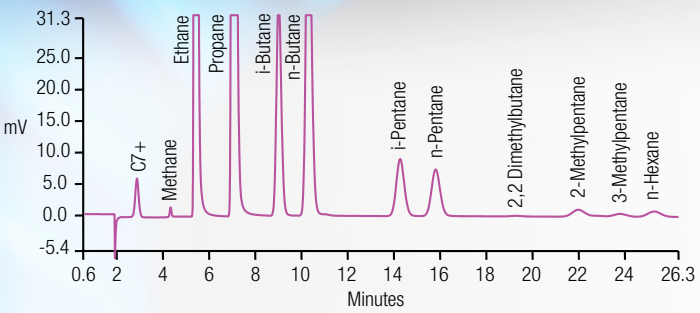
The Thermo Scientific Natural Gas Analyzer analyzes Natural Gas Liquid (NGL) samples to determine BTU content as outlined in GPA Method 2186. The system, based on the Thermo Scientific™ TRACE™ 1310 gas chromatograph, analyzes a single NGL sample on two independent channels—C7+ regroup BTU and C1-C16 extended hydrocarbon detail.

### Channel One Thermal Conductivity Detector (TCD)

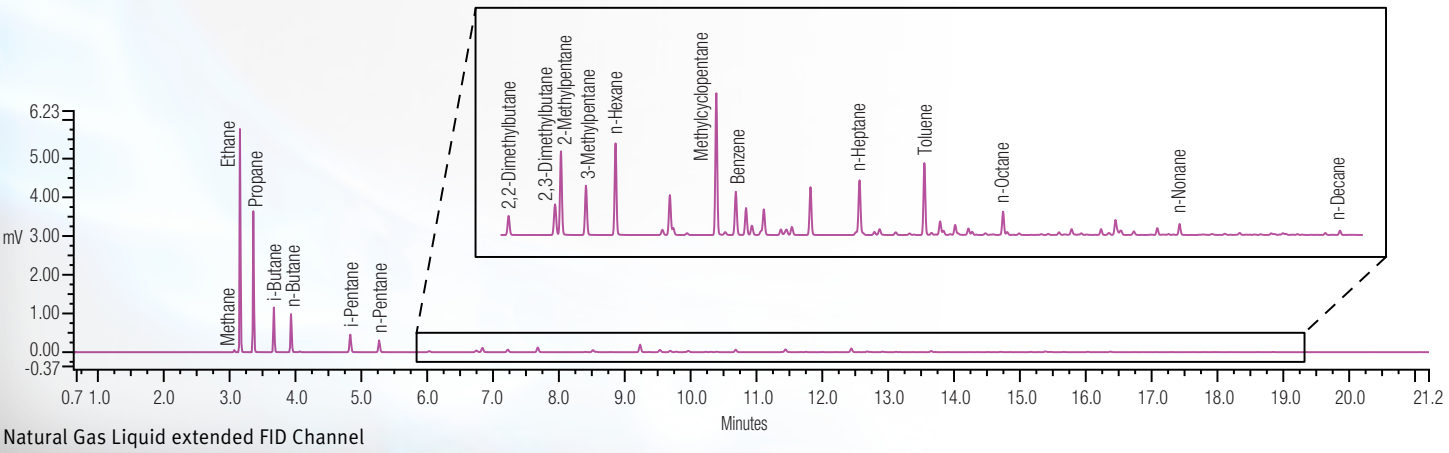
- Single high pressure liquid injection valve
- Components: C7+ regroup, Nitrogen (air composite), Methane, Carbon Dioxide, Ethane, Propane, i-Butane, n-Butane, i-Pentane, n-Pentane, 2,2 Dimethylbutane, 2-Methylpentane, 3-Methylpentane, n-Hexane
- Three packed columns in Auxiliary Valve oven
- Independently heated valve oven with two valves
- Plumbed with sulfur-resistant tubing

### Channel Two Flame Ionization Detector (FID)

- Single high pressure liquid injection valve
- One capillary column in GC oven
- Components: C1-C16 hydrocarbons




Natural Gas Liquid with C7+ early regroup




Natural Gas Liquid extended FID Channel

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| Natural Gas System Specifications | | |
|---|---|---|
| Channel | Channel One TCD | Channel Two FID |
| Analysis | Natural Gas Liquid C7+ | NGL C1-C16 |
| Detectors | TCD | FID |
| $N_2$(air composite), $CO_2$ | Yes | No |
| $O_2/N_2$ | No | No |
| $He/H_2$ | No | No |
| Hydrocarbons | C1-C6 with C7+ regroup | C1-C16 |
| Repeatability | <1.0% | <1.0% |
| MDL Hydrocarbons | 0.005% | 0.001% |
| MDL Perm Gases | 0.01% | NA |
| MDL $H_2S$ | 0.05% | NA |
| Valves per channel | 2 | 1 |
| Columns per channel | 3 packed | 1 capillary |
| Sulfur Inert | Yes | Yes |

Thermo Fisher Scientific offers a suite of more than 20 turnkey analyzers for natural gas, natural gas liquids, and liquefied petroleum gas. Single channel, dual channel, or multi-method combination systems are available to meet your requirements. Customized systems can be designed to meet individual analytical challenges as required. Contact your local representative for more information.

**For more information, visit www.thermofisher.com/oilandgasinfo**



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