



ASSESSING SAMPLE PROPERTIES AND COMPOSITIONAL ANALYSIS
– SGS GC-GOR™ SYSTEM



ASSESSING

COMPOSITIONS, RATIOS AND PROPERTIES ON-SITE AND ON DEMAND

Compositional analyses in the field with SGS GC-GOR™ technology and specialised Agilent 7890 Gas Chromatograph system for extended gas and liquid analyses. Gas/Oil Ratio, shrinkage, and compositional data confidence is achieved through multiple flash measurements on ultra-small volume samples either in the field or as part of the FluidPro PAL™ mobile laboratory.

GC-GOR™ CAPABILITIES

- Gas/Oil Ratio (GOR)
- Gas/Water Ratio (GWR)
- Condensate/Gas Ratio (CGR) measurements
- Oil or brine shrinkage factor with live sample density
- Full Reservoir Fluids Compositional Analysis
- Oil-based Mud (OBM) Contamination

Sample Charge Specifications

- Temperature Range: ambient to 350°F
- Pressure Range: 0 psia to 20,000 psia
- Sample Volume Requirement: 10 ml

Range of Applications

- PVT studies
 - Bottom-hole samples
- Separator optimisation
 - Wellhead samples
 - Separator samples
- Production allocation
 - Pipeline samples

Gas Composition by GC

- Extended gas compositions to C14 by Gas Chromatography (GPA 2286)
- Increased accuracy using second natural gas analysis (GPA 2261)
- Quantification of N₂, O₂, CO₂, H₂S, He, Ar

Black Oil, Volatile Oil & Condensate Liquid Properties by GC

- Oil n-Paraffin distribution to C36+ by capillary chromatography (GPA 2186)
- OBM contamination by skimming & subtraction

BENEFITS

- High quality laboratory analysis data in remote field locations
- Electronic temperature control providing high quality analyses
- Multiple flash & sample measurements for repeatability
- Small sample volume allows for easier manual handling and reduces hydrocarbon inventory
- Minimised sample transport costs
- Optimal analysis report turn around time

Services Performed Alongside

- Average Molecular weight by freezing point depression
- Multi-temperature density/viscosity (ASTM D 7042)
- Karl Fisher water content (ASTM D 4928)
- Radon in gas
- Mercury in gas (ASTM D 6350)

- Customisable Dräger gas analysis kit
- Customisable HACH water analysis kit

WHY SGS?

SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 64 000 people and operate a network of more than 1 250 offices and laboratories around the world. We are constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed.

We have a history of undertaking and successfully executing large-scale, complex international projects. With a presence in every single region around the globe, our people speak the language and understand the culture of the local market and operate globally in a consistent, reliable and effective manner.

We provide innovative services and solutions for every part of the oil, gas and chemicals industry. Our global network of offices and laboratories, alongside our dedicated team, allows us to respond to your needs, when and where they occur. Our reputation for independence, excellence and innovation has established us as the market leader in providing services that improve efficiency, reduce risk and deliver competitive advantage for you.

FOR MORE INFORMATION ON THE GC-GOR™ SYSTEM CONTACT

OGC@SGS.COM OR VISIT
WWW.SGS.COM/OGC

WHEN YOU NEED TO BE SURE

SGS