

Well Flow Management

Fluids Sampling and Analysis

UOP 212

Onsite quantification of hydrogen sulfide, mercaptans and carbonyl sulfide in hydrocarbon gas and liquid by UOP 212.

Various sulfur species are naturally present in hydrocarbons, with concentrations ranging from ppm to % levels. With even low levels of hydrogen sulfide (H₂S) toxic and hazardous to both personnel and equipment, accurate measurements are essential.

Understanding levels of sulfur compounds in fluids is critical to evaluating their impact on production and processing, and planning for their removal.

For reactive species such as H₂S it is vital that measurements are performed on fresh samples, and this requires analysis to be conducted onsite, immediately after sampling.

Expro provide analytical services to determine the concentrations of hydrogen sulfide, mercaptans (R-SH), and carbonyl sulfide (COS) in natural gas streams, as well as the volatile compounds in liquid hydrocarbons.

Analysis is a combination of stain tubes (e.g. Gastec, Drager) with UOP 212 – an industry standard technique for sulfur measurement.

Applications

- Quantification of sulfur species in gas and liquid during well testing
- Process monitoring
- Treater evaluation
- Souring studies

Features and benefits

- Onsite measurement ensures representative samples
- Dual techniques give data confidence
- Selective techniques minimize interferences
- Complemented by onshore sulfur speciation for quantification of 30+ individual sulfur species



Specifications

	Gas ppm v/v (µL/L)	Oil / Condensate mg/L
H ₂ S	0.1	0.1
R-SH	0.2	0.1*
COS	0.2	

*volatile mercaptans

For more information contact your local Expro representative or email fluids@expro.com

expro.com/wellflowmanagement

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