

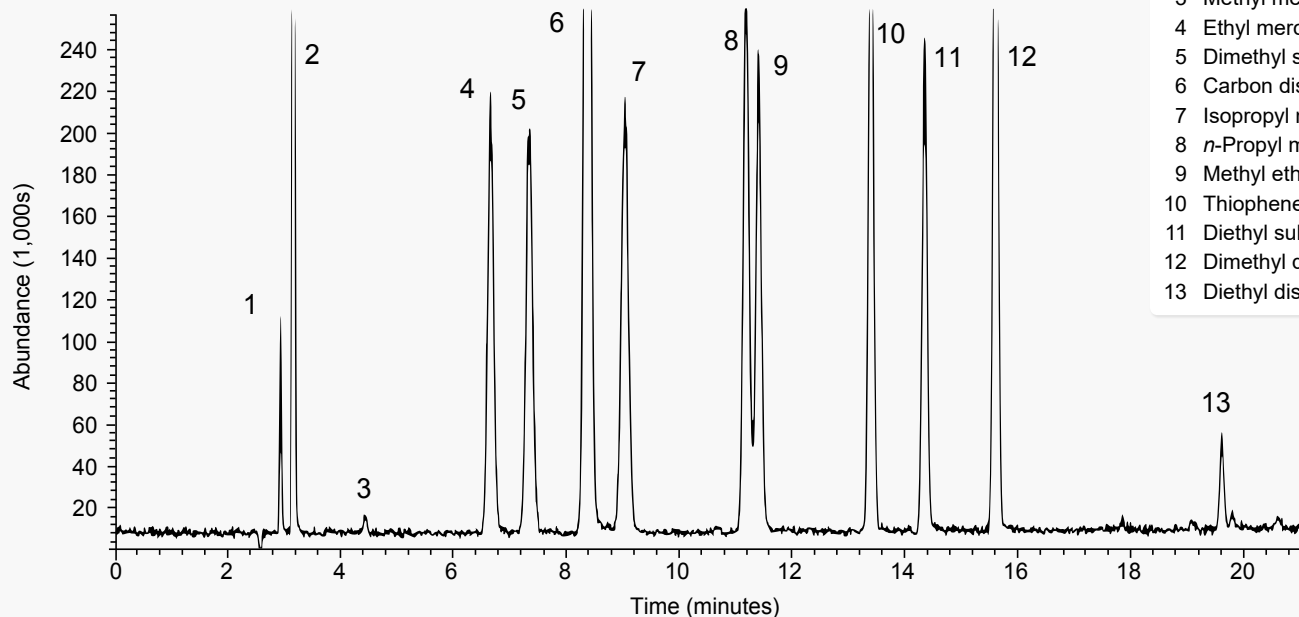
Ultra-trace Level Sulfur Speciation in Natural Gas and Liquid Natural Gas

CONSCI understands that natural gas impurities and particularly sulfur species are problematic. When they react irreversibly with the commonly used amine solution, absorbents, and catalysts, they contribute to absorbent losses in high temperature carbonate processing. Natural gas producers face difficult challenges in measuring let alone removing sulfur contaminants, reducing emissions, and meeting stringent specifications. Accurately determining the level of sulfur contamination is vital to the effectiveness of the impurity removal process. Natural gas/liquids impurities are challenging analytically as well, since they are particularly labile, and can form and dissociate easily.

With this in mind, CONSCI has developed state-of-the-art measurement techniques for sulfur and other gas contaminants

using GC-ICP-MS (gas chromatography – inductively coupled plasma – mass spectrometry) that delivers detection limits as low as 5 ppb or better. This technique's sensitivity and selectivity to sulfur species make it particularly well suited to this application. The chromatogram below illustrates an analysis of sulfur species at part-per-billion levels with simultaneous detection.

We are confident that these detection limits and the value of our Sulfur Speciation can't be beat. Call 1-800-240-3693 today to speak directly with one of our skilled analysts or explore all our capabilities at <http://consci.com>.



- 1 Hydrogen sulfide
- 2 Carbonyl sulfide
- 3 Methyl mercaptan
- 4 Ethyl mercaptan
- 5 Dimethyl sulfide
- 6 Carbon disulfide
- 7 Isopropyl mercaptan
- 8 *n*-Propyl mercaptan
- 9 Methyl ethyl sulfide
- 10 Thiophene
- 11 Diethyl sulfide
- 12 Dimethyl disulfide
- 13 Diethyl disulfide

Speciation of sulfur gases found in natural gas.

Start getting better results!

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