

NiSource Gas Transmission & Storage Gas Quality Sampling and Analysis Standards

Sampling

Continuous and spot sampling for compositional analyses is conducted per the American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.1, Collecting and Handling of Natural Gas Samples for Custody Transfer.

Sampling for hydrogen sulfide, odorant, and total sulfur is also conducted using API MPMS Chapter 14.1 procedures substituting a blue silco treated sample bottle.

Analysis

The gas chromatographs that NGT&S employs use GPA 2145 for their sampling procedures, physical constants, and analysis routines.

Laboratory analyses for continuous and spot samplers are performed by the NGT&S contract laboratory which uses GPA 2261 for all C6+ composition analyses and GPA 2286 for all extended composition analyses. The contract laboratory uses GPA 2199 for sulfur analyses.

Cricondentherm analyses are performed using Peng-Robinson equation of state modeling.