

## Utilized Gas Quality Industry Standards

### Gas Chromatography:

- **Sampling**  
GPA 2166  
*(Obtaining Natural Gas Samples for Analysis by Gas Chromatography)*
- **Analysis**  
GPA 2261  
*(Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography)*  
GPA 2286  
*(Tentative Method for the Extended Analysis for Natural Gas and Similar Gaseous Mixtures by Temperature Programmed Gas Chromatography)*  
GPA 2198  
*(Selection, Preparation, Validation, Care and Storage of Natural Gas and Natural Gas Liquids Reference Standard Blends)*
- **Calculation Methodology**  
GPA 2145  
*(Table of Physical Constants of Paraffin Hydrocarbons and Other Components of Natural Gas)*  
GPA 2172  
*(Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer)*

### Online Analyzers:

- **Moisture**  
Tunable Laser Diodes (TLD)  
ASTM D5454  
*(Standard Test Method for Water Vapor Content in Gaseous Fuels Using Electronic Moisture Analyzer)*
- **Hydrogen Sulfide**  
Tunable Laser Diodes (TLD)  
ASTM D4084  
*(Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels – Lead Acetate Reaction Rate Method)*
- **Oxygen**  
Tunable Laser Diodes (TLD)

### Field Tests:

- ASTM D 4984  
*(Standard Test Method for Carbon Dioxide in Natural Gas Using Length of Stain Detector Tubes)*
- ASTM D 4810  
*(Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length-of-Stain Detector Tubes)*
- ASTM D 4888  
*(Standard Test Method for Water Vapor in Natural Gas Using Length-of-Stain Detector Tubes)*