



# Solutions

Genetic Identification

Forensics

Environmental

Petroleum/Industrial

Food Safety

Value Added Services

## Accurately Assessing the Value of Natural Gas

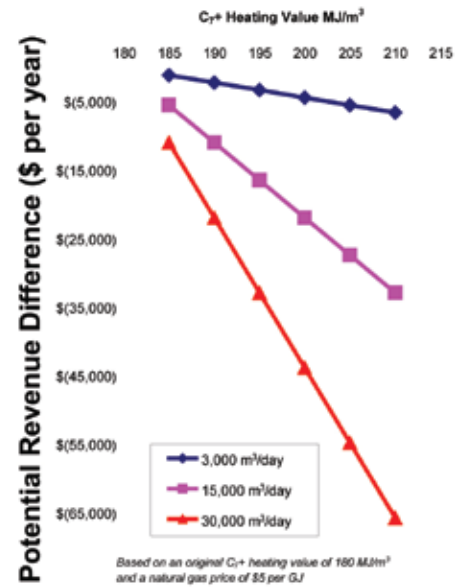
### By Enhanced Chromatography

The value of natural gas is a function of **composition** and **heating value**. Measurement of natural gas composition is an important element of the overall measurement process. Selection of analytical methods, quality assurance procedures, physical properties and conversion factors can all influence the results of a compositional measurement. Ultimately small differences or bias introduced during measurement can influence the financial value of the natural gas stream. Accurate prediction of liquids production also requires a detailed understanding of  $C_{7+}$  properties and volumes.

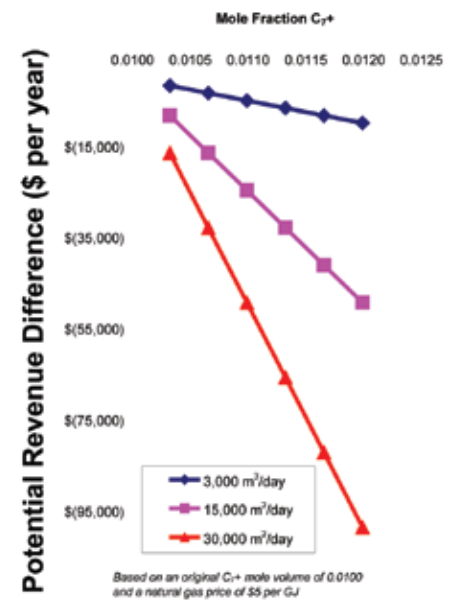
### Capabilities

- Detailed composition of natural gas to  $C_{15+}$  utilizing GPA 2286
- Detailed composition of natural gas to  $C_{7+}$  utilizing GPA 2286 with observed  $C_{7+}$  properties
- Compositional analysis of natural gas to  $C_{7+}$  using Energy Resources Conservation Board (ERCB) Directive 17 default values
- On-site sampling including field measurement of  $H_2S$
- Data verification with MaxxALERT program
- Electronic Data Delivery

### $C_{7+}$ Heating Value Chart



### $C_{7+}$ Mole Fraction Chart



Please turn over for:

Industry Trends, Data Quality, How to Contact Us

## Industry Trends

Extended analysis using observed C<sub>7+</sub> properties of natural gas is essential in today's Canadian natural gas industry. The methods for extended analysis involve multi-column and multi-detector designs that allow for a detailed description and quantification of major components, C<sub>6</sub> and C<sub>7+</sub> compounds and fixed gases. For intermediate and rich gases detailed analysis using observed properties will provide more accurate compositional measurements.

- **Observed properties of the C<sub>7+</sub> can have a significant financial impact on intermediate and rich natural gas streams**
- **Default properties of C<sub>7+</sub> are only recommended for lean gas streams**
- **Accurate reporting of C<sub>7+</sub> values is extremely important with increased audit activity**

## Data Quality

Maxxam is Canada's leading analytical provider of natural gas and natural gas liquids testing. Every analytical test is based on multi-component calibration. Verification of analytical results is accomplished with Maxxam's sophisticated data integrity algorithms and MaxxALERT programs. Maxxam's petroleum labs are accredited by the Standards Council of Canada (SCC) to the international standard ISO 17025 for the competence of testing and calibration laboratories.

For any information regarding our natural gas analysis and capabilities, please contact your Sales Representative or give us a call at (780) 378-8500.

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*“Maxxam provides the most sophisticated characterization of natural gas available. Our laboratories utilize state-of-the-art equipment and fully accredited operating procedures”*

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