

# NATURAL GAS ANALYSIS

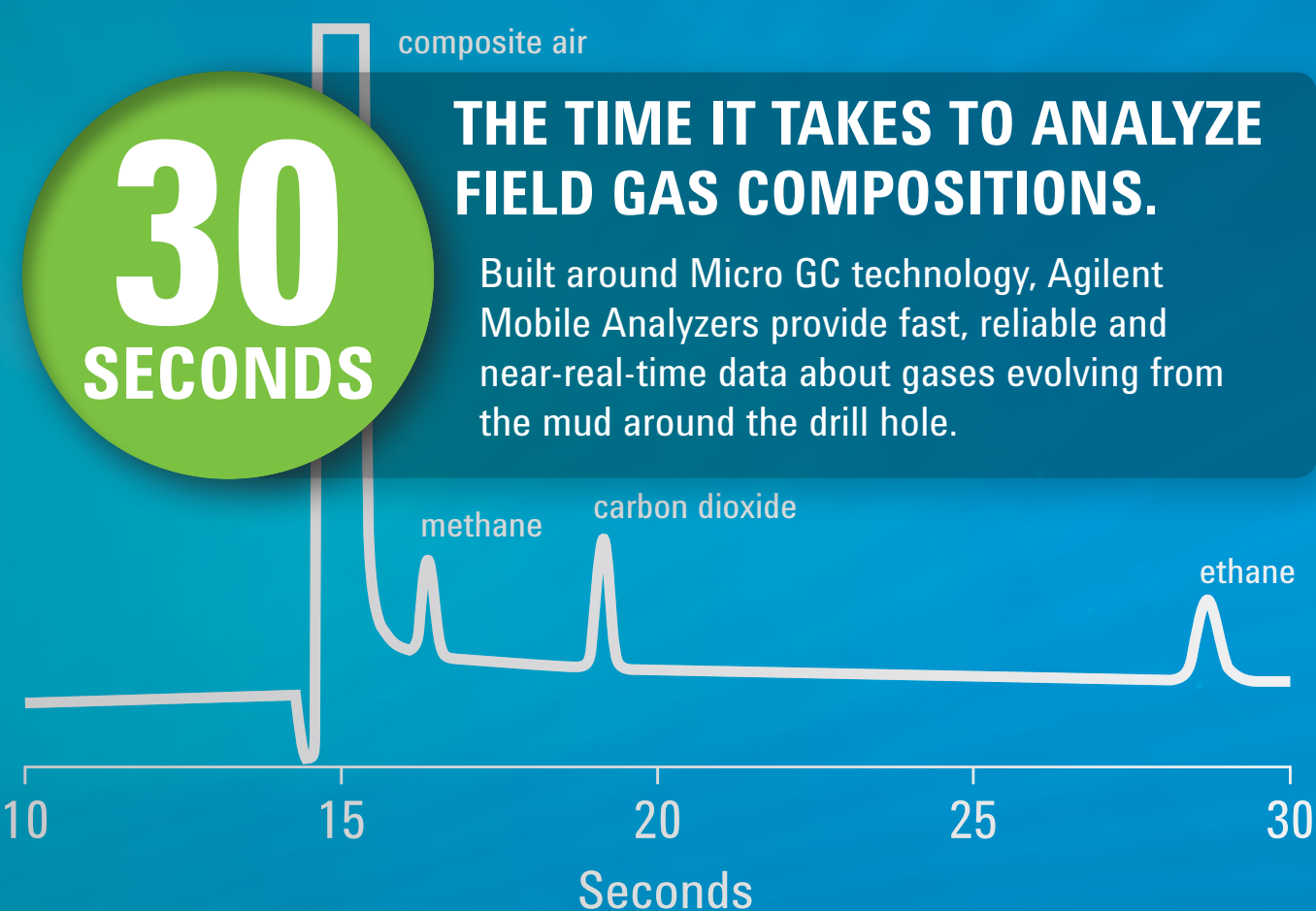
## WORLD OF SOLUTIONS

[www.agilent.com/chem/naturalgas](http://www.agilent.com/chem/naturalgas)



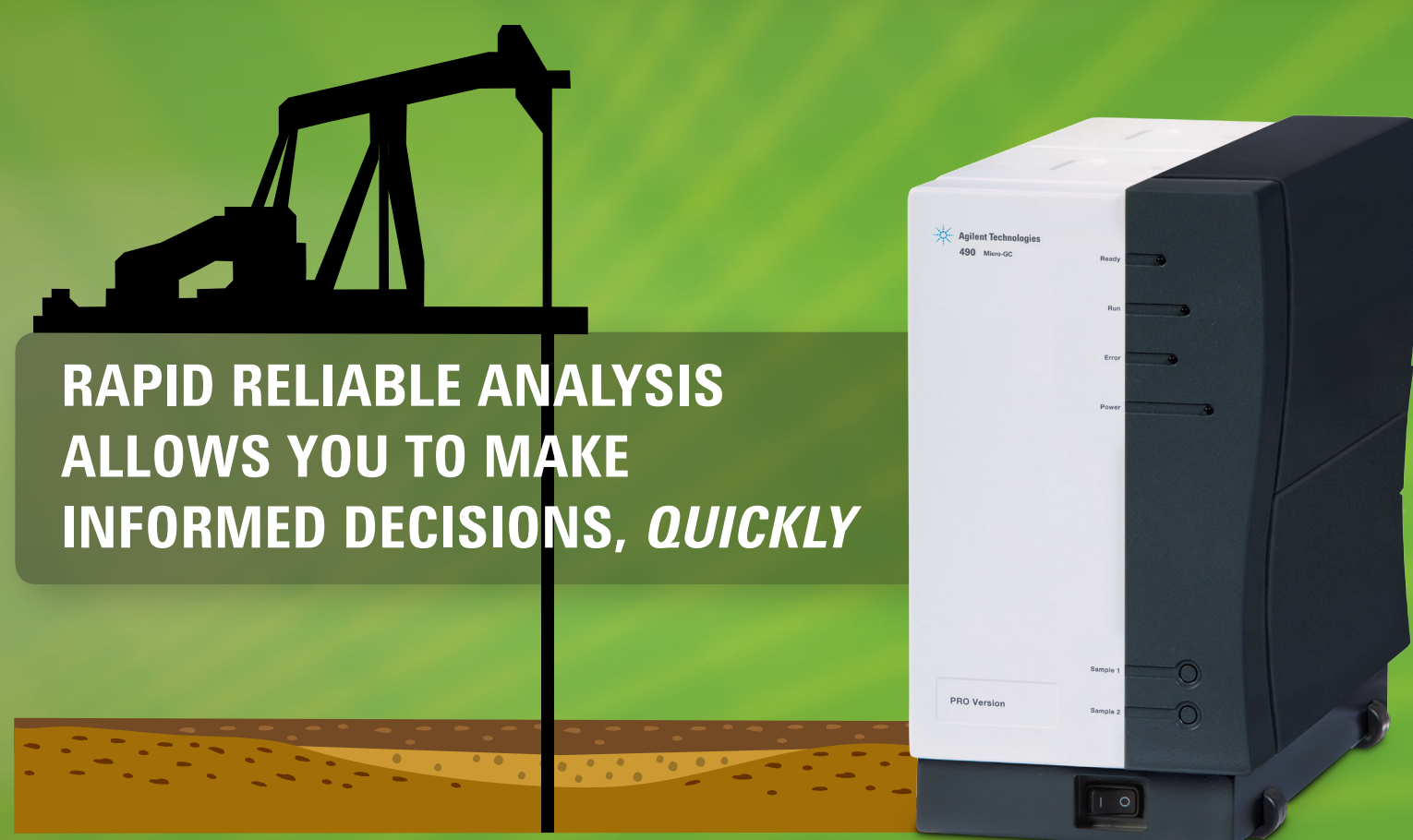
### EXPLORATION & MUD LOGGING

Through mud logging, geologists drill exploratory wells to evaluate content of the actual substructure. Mud logging and drilling exploratory wells allow geologists to evaluate content of the actual substructure.



### EXTRACTION

Upon locating a natural gas deposit, drilling experts begin the process of boring to the depth determined through the exploration activity. When the new well yields natural gas, engineers continue to evaluate the gas composition at the wellhead to monitor well efficiency.



**RAPID RELIABLE ANALYSIS  
ALLOWS YOU TO MAKE  
INFORMED DECISIONS, QUICKLY**

Agilent 490 Micro GC



### PRODUCTION

Before it is sold, natural gas must meet specifications for calorific value and purity. Accordingly, collection, processing and distribution demand an array of analytical capabilities. Production by-products – such as ethane, propane, butanes, and pentanes – require characterization prior to use in downstream processes.



Agilent 7890B Natural Gas Analyzer

**PROFILE SULFUR, PERMANENT  
GASES AND HYDROCARBON  
CONTENT USING AGILENT  
NATURAL GAS ANALYZERS**



### TRANSPORTATION

Typically, large volumes of natural gas move from extraction points to processing plants and from producing regions to consumers through an array of pipelines. Due to its corrosive nature, identifying sour gas prior to its distribution into the pipeline help protect resources from damage. Export can require that producers liquefy gas for international transport. To allow for commercial activity, producers determine calorific value of processed gas at the distribution head and prior to export.

**QUICKLY AND RELIABLY  
DETERMINE COMPOSITION  
AND CALORIFIC VALUE**



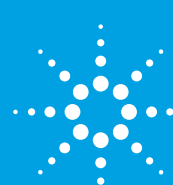
### DISTRIBUTION

Producers must accurately calculate calorific value and gas volume transferred to their municipality or industrial accounts. Because natural gas is colorless and odorless, leak detection and safety necessitates that producers add low levels of sulfur-based odorants to the gas streams prior to delivery. Distributors of natural gas must subsequently monitor odorant concentrations throughout the distributions system.

**ACCURATE, RAPID  
ANALYSIS ENSURES  
SAFETY AND  
PROFITABILITY**



The Agilent 490 Micro GC in a 19-inch rack



Agilent Technologies