

# PetrovisiON

*A complete solution for stable isotope analysis in the Petroleum Industry*



Small footprint



Ease of use



Advanced data analysis



Low cost of ownership



# Petrovision

*Thermogenic or  
Biogenic?*



**Stable isotope analysis is a critical technique for upstream reservoir exploration through well profiling. Understanding the origin of oil and gas in any new reservoir is an essential requirement for determining its feasibility and suitability for exploration.**

Recent plays for unconventional resources such as shale gas and coal bed methane as well as traditional

crude reservoirs are suitable for stable isotope analysis and Petro**vision** provides the complete solution for all possible sample types.

Petro**vision** offers significantly improved return on investment with minimal instrument contact time required and substantial data handling capabilities making the Petro**vision** a crucial resource for your laboratory.

*A powerful combination.*

④ **Elementar**

Market leading **isoprime vision**  
stable isotope analyzer



## ionOS<sup>®</sup> is the most advanced stable isotope software ever produced.



### ionOS KEY FEATURES

- Incredible new capabilities for acquisition and data processing.
- Elegant user interface with contextual control.
- Intelligent and automatic instrument performance optimization.
- Instantaneous data processing with dynamically updating results.
- Import your data from 3<sup>rd</sup> party instruments.

ionOS works in concert with the **isoprime visION** and **centrION** to provide an unrivalled level of intelligent control. Designed completely from the ground up and uniquely for stable isotope analysis, ionOS is the most sophisticated yet simple software ever created. Its clean user interface belies the level of sophistication within, giving users unrivalled capabilities to generate exceptional data with ease.

Petro**visION** reclaims responsibility for sample analysis from the user by offering incredible functionality both pre- and post-acquisition significantly reducing instrument contact time.

## isoprime visION is the most elegantly simple stable isotope analyzer ever created.

Simplicity is what **isoprime visION** is about. Creating something simple seems, well, simple. In fact, simplicity can only be achieved once the fundamental requirements of our customers are understood. With this clarity, **isoprime visION** offers a completely new experience of stable isotope analysis. An experience where the user is free from the routine chores of maintenance allowing them to focus on the science, not the instrumentation.

**isoprime visION** offers exceptional bulk and compound specific isotope analysis through market leading technology from Elementar and Agilent Technologies. Harnessing this technical ability through the **isoprime visION** finally opens the power of stable isotopes to practically any laboratory.



### isoprime visION KEY FEATURES

- Almost 50 % smaller than any other instrument
- Straightforward analysis and intelligent control for incredible ease of use
- Powerful ionOS Peak Mapping reduces whole oil data processing time to minutes rather than hours, generating a large increase in lab productivity
- Intelligent monitoring gas injection and inlet handling with **centrION**
- Good-For-Go control significantly reduces instrument contact time
- 100 V amplification for large dynamic range samples such as natural gases
- Market leading GC furnace design provides long term, robust sample analysis without re-conditioning

### Agilent Technologies

Market leading 7890B  
gas chromatograph



## PetrovisION ENHANCEMENTS

- For complete confidence in your GC-IRMS analysis, add the Agilent 5977A mass selective detector for simultaneous compound identification and isotope analysis
- Take your instrument throughput to the next level by adding a Gerstel IsoTube autosampler for unattended analysis of natural gases supplied from the well using IsoTubes
- Expand your capabilities by adding complementary bulk isotope and elemental analysis of heavy oil NSO's
- Ground water / well water analysis can be performed using the vario LIQUID sampler.

Expand your research further.

### Ⓢ Elemental Analysis

Conversion of whole oils to sample gases prior to isotope analysis

### Ⓢ Isotope Analysis

Intelligent analysis of sample gases from GC & EA inlets

### Ⓢ Gas Chromatography

Separation of volatile organics and real time conversion to sample gases



## RESEARCH AREAS SERVED

- Oil exploration companies
- Unconventional exploration companies
- Industry service laboratories
- Academic research laboratories

## SAMPLE TYPES ANALYZED

- Natural gases
- Whole oils
- Saturated / unsaturated oil fractions
- Kerogens, asphaltenes, etc.
- Shales, sediments, carbonates, sulphides, nitrates



### Small footprint

Almost 50 % smaller than any other commercial stable isotope analyzer



### Ease of use

Good-For-Go control allows one click instrument set-up



### Advanced data analysis

The most powerful stable isotope data processing software ever created



### Low cost of ownership

Instrument sleep / wake-up functions for reduced consumption of resources

### Elementar – your partner for excellent elemental analysis

Elementar is the world leader in high performance analysis of organic and inorganic elements. Continuous innovation, creative solutions and comprehensive support form the foundation of the Elementar brand, ensuring our products continue to advance science across agriculture, chemical, environmental, energy, materials and forensics markets in more than 80 countries.

### Elementar Analysensysteme GmbH

Elementar-Straße 1 • 63505 Langenselbold (Germany)  
Phone: +49 (0) 6184 9393-0 | info@elementar.com | www.elementar.com

