Looking for the ultimate in Mud Gas Isotope Logging?

Here’s a positive result.

The Isologger and Isologger Lab are unique Isotope Ratio Mass Spectrometer (IRMS) systems, specially built by Compact Science Systems to meet the exacting demands of the mud logging industry. And, for the first time ever, you now have a choice between an in-field machine and a more traditional lab-based one.

Isologger is a new and unique concept in Mud Gas Isotope Logging (MGIL) – it’s the first ever Isotope Ratio Mass Spectrometer (IRMS) that’s purpose-built to provide real-time analysis at drill sites anywhere on earth. As such, it brings enormous time and cost savings, with all the accuracy and reliability you’d expect from a bespoke Isotope Ratio Mass Spectrometer (IRMS).

- Isologger is a compact, rugged machine with a preparation system – it fits a standard 19-inch rack
- Comprises IRMS, gas chromatograph (GC) and combustion furnace
- Separates mud gases into methane (C1), ethane (C2), and propane (C3) and converts them into carbon dioxide to determine 13C levels
- On-board calibration gas ensures accuracy and corrects system drifts
- Data is generated in tabular form and is easy to import into your system with a time stamp

For off-line routine Mud Gas Isotope Logging (MGIL), meanwhile, there’s Isologger Lab, our traditional lab-based system. Needless to say, this more controlled environment means it can offer extra features.

- Includes an auto sampler with racking for 77 Isotube sample containers
- Uses head space analysis techniques
- Up to 10 samples can be automatically taken from each Isotube, generating isotopic values from C1 to C8

Reanalysis, statistical averaging and recalibration are straightforward.
About Compact Science Systems

Based in the UK, Compact Science Systems is the only company in the world currently offering a dedicated Mud Gas Isotope Logging (MGIL) mass spectrometer designed for use on-site anywhere in the world.

We were also the first company to put a Stable Isotope Ratio Mass Spectrometer (SIRMS) to extra-terrestrial use; the European Space Agency asked us to deploy a machine on the Mars Express in 2003. Although specially designed, the key features of that SIRMS – compactness, sensitivity and robustness – form the foundations of our entire unique range today, including the Isologger and Isologger Lab.

Dennis Leigh, Managing Director and Chief Designer at Compact Science Systems, made the Beagle 2 Mars Lander’s IRMS.

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