

SPE

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INDUSTRIAL NEWS

Living the energy 2013

Giuseppe Previtera Photo Chemical Award

In memory of Giuseppe Previtera, Award
Winner of SPE Photo Chemical Award
Awarded to him by the Society of Petroleum Engineers



JOURNEY THROUGH THE PAST



Italian Section



TECHNICAL NEWS

OIL INDUSTRY PROFESSIONS

TECHNICAL BULLETIN SPECIAL 2012

SPE INTERNATIONAL

GEOLOG

SURFACE LOGGING

THIRTY YEARS OF SURFACE LOGGING

30th

ANNIVERSARY
1982 - 2012

to reduce drilling time and costs
to improve rig safety
to detect and evaluate reservoirs

Celebrating 30 years of technological leadership and independence

Across 35 countries of operations, GEOLOG's unique focus is on Surface Logging. GEOLOG's leadership in advanced technologies for drilling optimization and formation evaluation is the result of 30 years of field experience and continued active research and development in co-operation with clients.

GEOLOG's advanced surface logging services and technology coupled with highly qualified and experienced personnel, permits clients to improve drilling efficiency and reduce unproductive time, saving costs and improving safety.

GEOLOG is a world leader in gas detection while drilling, thanks to its advanced gas extraction systems and its unique gas analysis system (DualFID™). Through hydrocarbon analysis from Methane to Toluene, drilling parameters measurement (hydraulics, mechanical and engineering) and the ability to manage third party data such as LWD and wireline, GEOLOG provides its clients with timely information, at the rig site and anywhere thanks to its Real-Time data transmission system Wellcoms. GEOLOG also runs a number of complementary services which range from Cutting Volume Monitoring for drilling operations optimization and borehole stability monitoring to formation fracture detection or the geochemical analysis and interpretation of drilling cuttings, which can save budgets and, in certain cases, entire wells.



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Technology Applications

by Vincenzo Pozzi - Editorial Committee Member

Carbon Isotope Analysis Available While Drilling

A new detection tool developed by Geolog International enables to measure the carbon isotope ratio of hydrocarbon gases on-site, while drilling.

Typically, oil companies collect gas samples during the drilling phase, at certain intervals, and send them to remote laboratories for analysis. The results indicate the origin of the gas, the type of kerogene and the maturity of the source rock. This procedure can take up to 6 months and provides a discontinuous measurement of the isotopic ratios.

The new system enables to carry out such measurements and obtain results in Real-Time.

^{13}C ratio measured on methane enables to recognize biogenic, mixed and thermogenic origin of methane. It can give indication of the approaching of a reservoir and provide information about the status of the seal.

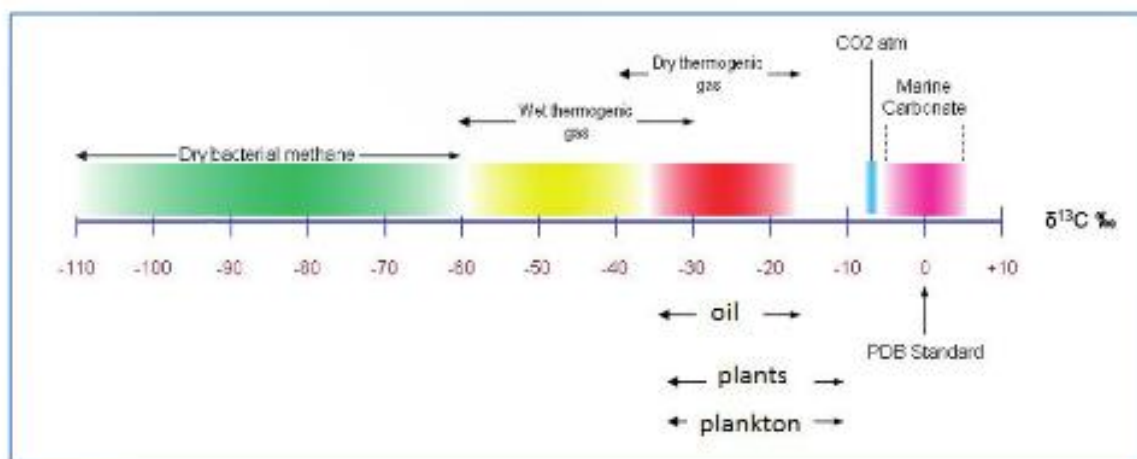
The new Geol isotopes tool, for the first time, is able to measure the ^{13}C isotopic ratio on ethane, in situ. Methane and ethane isotopes ratio enable to assess origin and migration of the gas.



Geolog's Geol isotopes gas detection system.

The system has already been deployed on a series of ultra-deepwater operations, where it has provided results which has enabled quick decision-making. A crucial advantage considering the intrinsic cost of operating time in deepwater projects.

(www.geologinternational.com)



Isotopic ratios chart correlating methane ratios with the origin of the gas.