

From Prediction to Production



Green Imaging Technologies (GIT) provides solutions for lab-based analysis of rock core via Nuclear Magnetic Resonance (NMR). Our products and services offer **fast, accurate, non-destructive analysis** of rock core samples used by the oil and gas industry in exploration and reservoir characterization.

The software has been validated by several national and international oil companies, as well as by several large core analysis labs.

Our software maximizes **the power of the NMR instrument** by expanding the analysis that can be done, and expanding who can perform these analyses. In addition to traditional NMR analysis such as T_1 and T_2 cut-offs, Green Imaging Technologies offers more advanced core analysis, including our patented capillary pressure measurement, **GIT-CAP™**.

Our users can perform NMR analysis **5 times faster**, while getting up to **10 times as many data points** per scan. These powerful analysis methods are accessible via a standard Windows-based user interface which provides **scan automation** tools such as Scan Cards, and allows users to create **customized reports** to publish the results of their analyses.

The software **stores all data** in a SQL database allowing users to compile their rock core data in a central store for historical look-up and back-up. The software also ensures our client's NMR instruments are running at peak performance, with a **full suite of calibration and maintenance tools**. These tools ensure our users have **less service calls and more uptime**.

GIT's product lines empower our clients NMR instruments by providing a mechanism for non-experts to perform expert rock core analysis in less time than with traditional NMR methods, all the while providing more data output from the same hardware.

Green Imaging Technologies also offer **commercial testing services** which allow clients to take advantage of our unique suite of non-destructive testing protocols without setting up their own lab. GIT staff are experts in NMR rock core analysis and are continually trained in the latest techniques.

Users can perform the following analyses quickly and easily within our easy to use interface:

- Porosity
- Capillary Pressure
- Diffusion
- Bound Water
- Free Fluid Index
- Clay Bound Water
- T_1 / T_2 Cut-off
- Wettability
- Relative Permeability
- Well Log Calibrations
- Pore Throat Distribution





BENEFITS

- Direct monitoring, calibration and maintenance of the NMR instrument
- Well-Log Calibrations
- Scan Cards – prepackaged standard testing protocols which can be customized
- Customizable Reports – Users can customize the report templates to match their needs
- Robust database storage allowing for back-up and restore of data
- Ability to import external data
- More data, more accuracy, and less testing time
- Multi-Sample Analyses – Statistical and other comparisons across samples
- Excellent results with low permeability rocks

SOFTWARE SOLUTIONS

Green Imaging Technologies is focused on developing software for lab-based NMR measurements. Our technologies allow the **fast, accurate, non-destructive analyses** of core plugs by measuring the saturation distribution of water and oil within samples. Our measurement techniques give standard NMR measurements, but also more advanced reservoir properties such as **capillary pressure, wettability, and relative permeability**.

Our software products provide direct control of the NMR instrument and provide **calibration, monitoring and maintenance capabilities**. The software learns the capabilities of the instrument in use, and prevents users from exceeding those capabilities. This interaction with the instrument helps maximize performance and uptime, while reducing service calls.

Whether you are an advanced user looking to perform the latest SCAL NMR testing techniques or are new to NMR, GIT's software products can provide you with an **all-in-one solution for NMR rock core measurements**.

Currently, Green Imaging Technologies offers two main product lines, LithoMetrix and GIT Systems.

LithoMetrix™

LithoMetrix provides an intuitive, Windows-based user interface that interacts directly with the NMR hardware and allows **non-experts to perform expert analysis** of rock cores. LithoMetrix offers standard analysis outputs and is an exclusive product for Oxford Instruments' NMR instruments. Several **pre-programmed well-log analysis** protocols come pre-packaged with the software, and can be customized to meet a user's specific needs. In addition to running single sample tests, LithoMetrix also allows users to run **multi-sample analyses** to provide statistical analysis across samples.

To simplify NMR analysis, the software has a **robust database backend** that provides a central store for all rock core data, including pictures of core samples and links to external data sources. The user can also create customizable reports to output their analysis results for delivery to clients or management.

GIT Systems

GIT Systems is an **advanced special core analysis** product that allows users to perform the latest core analysis methods, including our patented capillary pressure measurements. GIT Systems offers all the same functionality and benefits of the LithoMetrix software, and adds more advanced analysis protocols **using internal gradients** in the NMR instrument.

GIT Systems is available for use with several NMR hardware platforms.

Using an intuitive, Windows-based user interface, users can quickly and easily perform advanced core analysis such as diffusion distribution, pore throat distribution, relative permeability and GIT's patented capillary pressure measurements, GIT-CAP and Quick-CAP. Additional protocols include **multi-dimensional analyses** and some **advanced carbonate analysis**.

COMMERCIAL TESTING SERVICES

Our commercial testing services provide an opportunity to take advantage of the speed and data richness of NMR-based rock core analysis without setting up your own lab. Even if you have your own NMR lab, our expertise can be used for **result validation, or for advanced analyses**. Our testing packages are non-destructive, and our methodologies have been **vetted by NMR industry experts**.

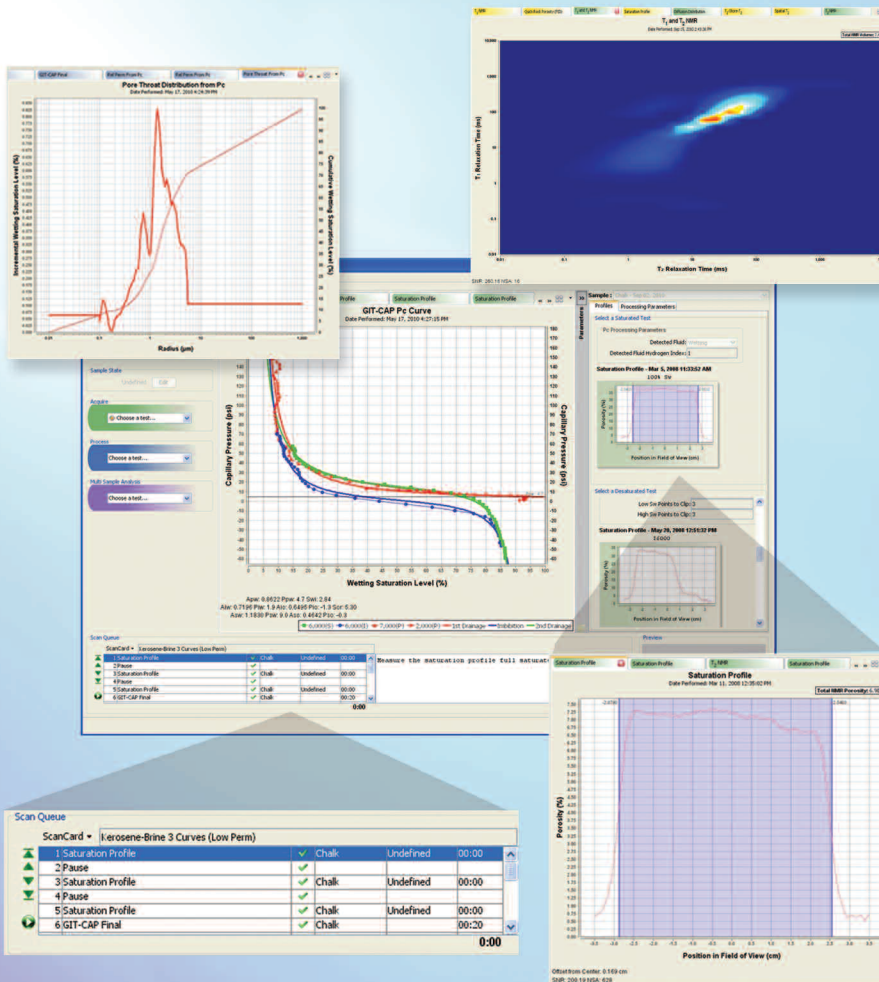
Our lab is the only commercial lab certified to perform our GIT-CAP capillary pressure measurement, which is the **fastest method of getting a measured Pc**. A byproduct of GIT-CAP is the ability to measure both positive and negative portions of the Pc curve. No other lab matches our NMR rock core analysis expertise.

GIT offers **custom testing solutions** that will ensure you find the right solution for your difficult exploration regimes. GIT's lab specializes in **unconventional plays**; those with low permeability and low porosities. Our lab is equipped with two NMR instruments, two centrifuges and all the equipment necessary for core preparation, from cleaning to saturation.



The following tests are available from GIT's Commercial Lab:

- T_1 and/or T_2 pore size distribution
- FFI, BVI, T_2 cut-off, spectral cut-off, and NMR permeability
- ID porosity profile
- Internal field gradient analysis using multiple TE's
- GIT-CAP capillary pressure (Pc)
- Irreducible water saturation
- Entry pressure
- Diffusion distribution
- 2D Mapping
- Advanced modeling
- QUICK-CAP Pc Modeling
- Relative permeability from Pc
- Pore throat size from Pc
- Wettability
- CBW comparison
- Statistical analysis across samples





PARTNERS

Green Imaging Technologies realizes the importance of partnerships when doing business in the global economy. To this end, we have developed partnerships with several key players in the NMR rock core analysis marketplace.

GIT has always worked closely with industry experts to insure our products and services meet and exceed client expectations. This close industry connection also ensures GIT remains ahead of the NMR core analysis technology curve.

GIT continues to seek out new and exciting partnerships, but the following are examples of the caliber of industry players that have joined forces with Green Imaging Technologies.

Oxford Instruments

Green Imaging Technologies have an exclusive partnership with Oxford Instruments, the leading rock core NMR instrument manufacturer, to promote LithoMetrix as the preferred software application package for all new NMR instruments, and to offer LithoMetrix as an upgrade to existing instrument users. Oxford Instruments is also a preferred hardware platform for GIT Systems software and the two components are designed to work seamlessly together.

University of New Brunswick

The strategic cornerstone of Green Imaging Technologies is the unique and close relationship with the University of New Brunswick's world class MRI Research Centre headed by Dr. Bruce Balcom. Green Imaging Technologies acquired the rights to the underlying technology for GIT Systems from the MRI Research Centre in 2006.

Green Imaging Technologies supports ongoing research at the University of New Brunswick through annual contributions. The combined funds and grants insure the continuation of high quality "deep science" projects. GIT has a right of first refusal on all intellectual property coming out of this relationship .

MEMBERSHIPS

Society of Core Analysts
Society of Petrophysicists and Well Log Analysts
Society of Petroleum Engineers
Canadian Well Logging Society

PATENTS

Green Imaging Technologies holds 10 patents related to the protocols, techniques and functionalities available in our software. Several of the patents are related to our Capillary Pressure measurement, GIT-CAP. A patent summary is provided on our website.

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