

GORE™ SURVEYS

FOR OFFSHORE GEOCHEMICAL EXPLORATION



Bringing Focus
to Prospect
Prioritization



GORE™ SURVEYS

See the 3Ds of Your Prospect

Geophysics

**3Gs of
Data Integration**

Geology

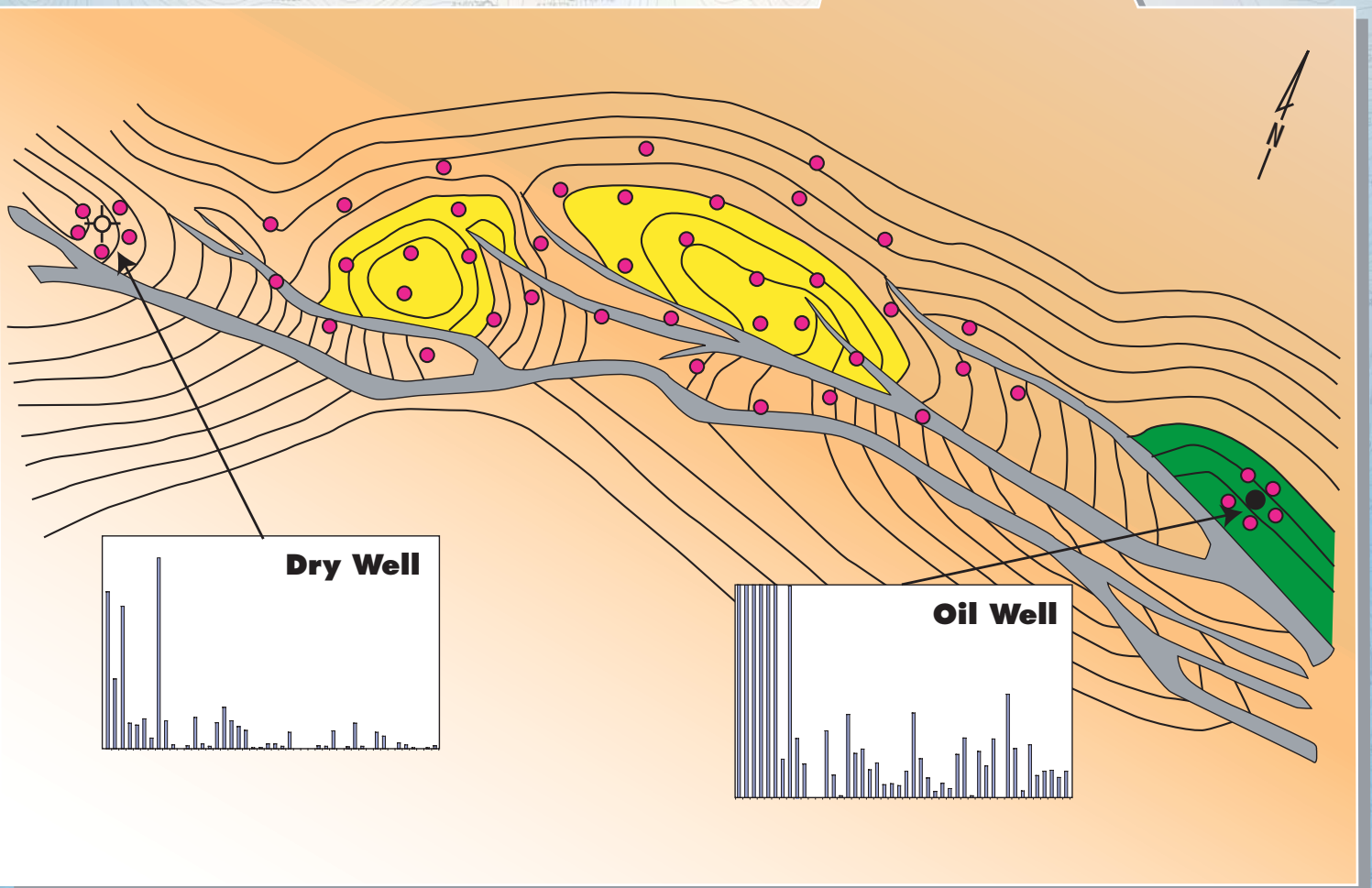
GORE™ Survey
(Geochemistry)

Detection
of Reservoirs

Delineation
of Resource Extent

Differentiation
Oil-Gas-Dry

**3Ds of
Exploration
Success**



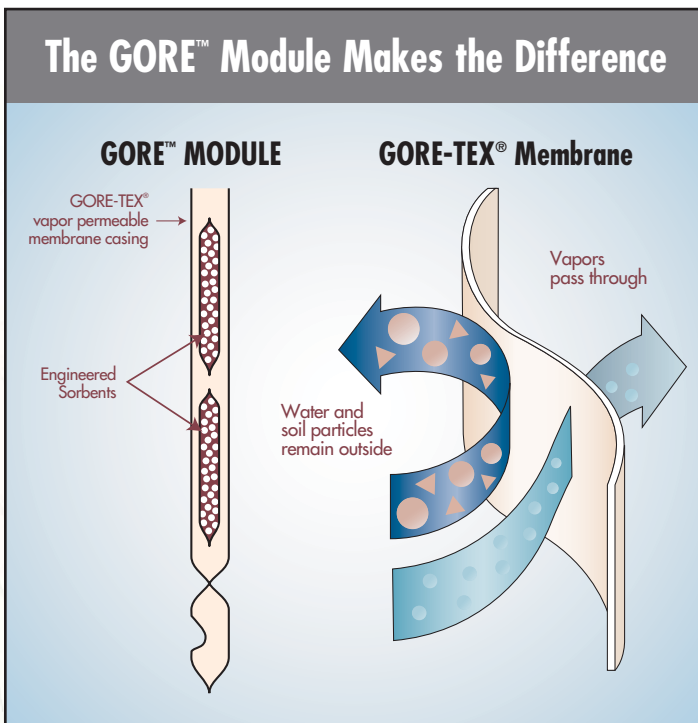
REDUCE COSTS. REDUCE RISKS. INCREASE SUCCESS.

Until now, 'surface geochemistry' offshore meant hiring costly, specially equipped vessels for sampling targeted seafloor features. But what if a feature is missed, or the macroseepage location is offset from the reservoir, or surface signal strength is insufficient?

Now there is a passive sampling technique that is sensitive to microseepage signals, providing better data from the start. Plus, sampling is made easy through economical deployment options and expert

assistance from Gore. That means more data for you, and a greater potential to find what other methods often miss.

The GORE™ Survey delivers direct hydrocarbon indication of a prospect's charge – giving you the information you need to focus exploration efforts, thereby reducing costs, reducing risks. . . and increasing success.

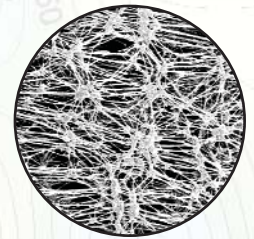


Proven Accuracy

96% ACCURATE
in Predicting Dry Wells

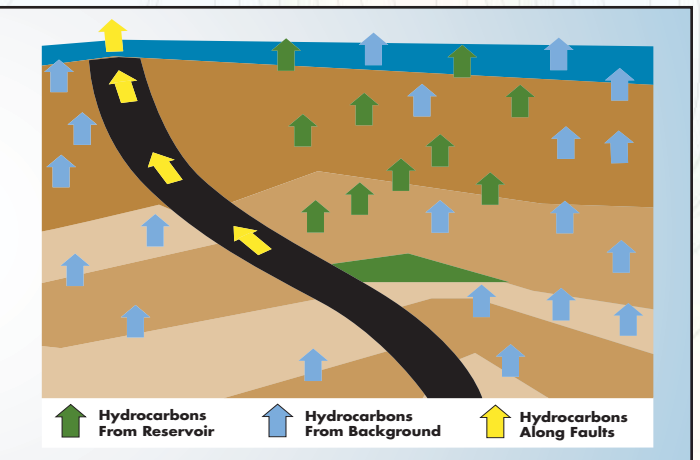
92% ACCURATE
in Predicting Geochemical Anomalies

With over 80% open pore space, the GORE™ module keeps water out while allowing vapors to pass through to the sorbents, unimpeded. This works in much the same way as our famous waterproof, breathable GORE-TEX® fabric: protecting your sample, protecting you. (See 50,000X view of membrane porosity, to right.)



The Microseepage Advantage

The patented GORE™ Module, with its vapor-permeable membrane and proprietary sorbent mix, enables the capture of microseepage signals from interstitial hydrocarbon gases. Compared to macroseepage detection – where only a minority of samples contains sufficient hydrocarbons – the GORE™ Survey allows for more detailed analysis and interpretation.



SIMPLIFIED FIELD OPERATIONS

Unlike other offshore geochem studies, the GORE™ Survey requires no onboard laboratory or special collection apparatus. We make it easy. Sample collection can run parallel with your other data acquisition programs, or Gore can provide turnkey service in cooperation with internationally experienced offshore contractors.

It works like this. Seabed samples are collected at pre-determined locations, using standard coring tools. Cores are sub-sampled onboard and placed into sample containers along with GORE™ Modules. The filled containers are then returned to Gore for analysis.



PROVEN ANALYSIS & INTERPRETATION

Back at the lab is where Gore's nearly 15 years' experience kicks in. State of the art TD/GC/MS analysis provides a rich data set covering compounds from C2-C20 including some biomarkers and the important C5-C15 range. Stable carbon isotope data is available optionally. Our scientists then apply years of experience in chemometric analysis to compare geochemical features to known geologic trends & structures.

Your final report includes a project review, modeling information, a mass data table, a grid sample model probability table, and color-contour maps of petroleum-like probability distribution. Integration with additional G & G is also available, as is consultation with our project managers every step of the way.

OUR EXPERIENCE

Nearly 15 years providing energy exploration services:

- Over 400 onshore and offshore exploration surveys in multiple basinal/international settings
- All terrains, climates, soil conditions and water depths
- Part of Gore's energy technologies portfolio

OUR EXPERTISE

The GORE™ Survey team is comprised of professionally accredited:

- Geologists - Geoscientists - Explorationists
- Chemists - Engineers - Statisticians



When to Use GORE™ Surveys Offshore

From Transition Zone to Deep Ocean Anywhere a Seabed Core Can be Taken

FRONTIER: Determine hydrocarbon potential over large, previously unexplored areas

EXPLORATION: Focus geophysical efforts, prioritize drilling prospects, or assess potential traps

DEVELOPMENT: Define areal extent of producing fields and locate potential areas of missed pay

PROVEN SUCCESS – CASE HISTORIES

South China Sea (2001)

Objective:

Demonstrate ability to differentiate oil fields from background via microseepage

Survey:

- 56 cores from oil fields & background
- Shallow water depths, 70-90m
- Clays, silts & sands
- 5m cores samples every meter

Results:

- Oil fields clearly differentiated from background
- Client convinced to undertake additional survey for prospect prioritization

Proof of concept offshore

Gulf of Mexico Shelf (2002)

Objective:

Determine extent and potential of gas charge in a number of undrilled prospects

Survey:

- ~200 cores
- Shallow water depths, 15-30m
- 3m drop core, avg. depth 1-1.5m
- ~\$500K Survey

Results:

- Modeling was effective
- Several areas were identified as anomalous, and corresponded to updip fault closures
- Client successfully bid and acquired the acreage
- 3 successful wildcat wells drilled on positive GORE™ Survey results
- Gas production development ongoing

Cost effective way to focus drilling budgets

North Sea (2002)

Objective:

Detect reservoir signatures over previously identified features

Survey:

- 56 cores from 3 areas: pockmark, shallow gas reservoir, & suspected leaking fault & chimney area
- Shallow water depths, 30-45m
- Silts and sands
- 5.25m cores sampled every meter

Results:

- Shallow gas reservoir clearly noted in deep core data
- Condensate field also detected
- Pockmark shown to be dormant - similar to background
- Gas chimney not prominent

Excellent correlation with the concurrent seismic interpretation



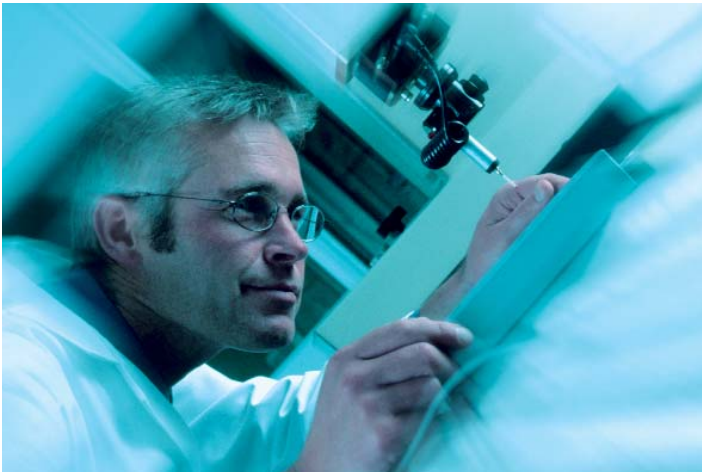
GORE. INNOVATION WITH INTEGRITY, EVERY DAY.

With nearly 45 years' experience, W. L. Gore & Associates is a global enterprise built on innovative technologies that revolutionize markets. From industrial sealants to medical implants, everything we do is based on a fundamental knowledge of the versatile polymer PTFE. . . and a deep understanding of the markets we serve.

Best known for our GORE-TEX® consumer brand of waterproof-breathable fabric, we are equally well noted for best-in-class products in challenging applications, including microfiltration, contamination control, and electronic interconnects.

We are particularly proud of our energy products portfolio. Gore is the world's leading supplier of critical components for fuel cells, filtration products for power generation plants, and electrodes for batteries and EDLCs, to name just a few.

Today, our enterprise is comprised of over 6,000 associates in 45 locations worldwide. Annual revenues top \$1.6 billion. We take our reputation for product leadership seriously, continually delivering new products and better solutions to the marketplaces of the world. At Gore, it's all about innovation, with integrity, every day.



GORE-TEX® expanded PTFE exhibits an amazing array of properties. It is porous, hydrophobic, chemically inert, and functions within a wide temperature range. Gore scientists and engineers are versed in the overlapping disciplines of high polymer chemistry and a broad range of specialized applications. We hold more than 650 U.S. patents.



SURVEY PRODUCTS GROUP

W. L. Gore & Associates, Inc.
100 Chesapeake Blvd.
PO Box 10 • Elkton, MD 21922 USA

Phone: 410.392.7600

Fax: 410.506.4780

Email: exploration@wlgore.com

SALES OFFICES:

Houston: 281.405.5540

San Francisco: 415.648.0438

Germany: +49.89.4612.2198

UK: +44.1590.688608

To find out more:

www.gore.com/surveys

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