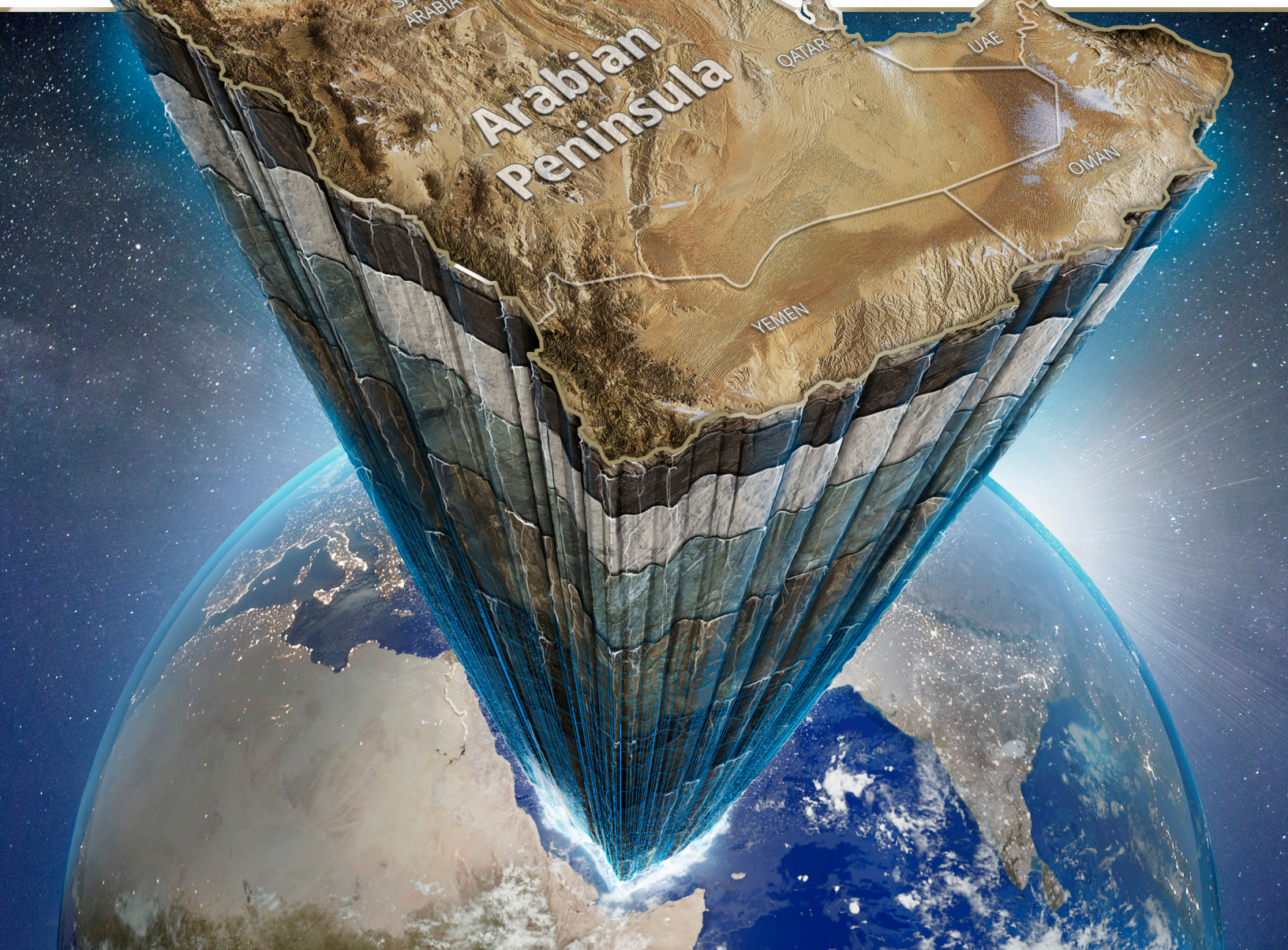




# 2022 | Core Laboratories ANNUAL REPORT

Arabian Peninsula Opportunities Abound





## Core Laboratories is the Reservoir Optimization Company™

Core Laboratories is a leading provider of proprietary and patented reservoir description and production enhancement services and products. These services and products enable the Company's clients to optimize reservoir performance and maximize hydrocarbon recovery from their producing fields. The Company has over 70 offices in more than 50 countries and is located in every major oil-producing province in the world. Core Laboratories provides its services to the world's major, national and independent oil companies.



### Front Cover

Core Lab has a long-standing reputation for optimizing the performance of clients' reservoirs through innovative technologies. The Company's global laboratory network spans over 50 countries and is staffed by best-in-class scientific innovators and professionals. These dedicated employees are the driving force behind the analytical programs that are achieving powerful results for Core Lab's clients throughout the Arabian Peninsula.

### Contents

#### Inside Front Cover

- 1 About this Cover
- 1 Message from the Executive Team
- 4 Arabian Peninsula Present and Future Developments
- 7 Core Lab Technologies for Optimization of Arabian Peninsula Unconventional Oil Plays
- 9 Bright Future

#### Inside Back Cover

Directors, Officers, and Corporate Information





## Message from the Executive Team



From left to right: Mark Tattoli, Gwen Gresham, Chris Hill, Larry Bruno.

During a year marked by several global challenges, Core Laboratories continued to manage operations while maintaining financial stability. The Russia-Ukraine conflict and associated sanctions brought volatility to Core Lab’s Russian, Ukrainian, and European laboratory networks, as traditional global crude-oil supply and trade patterns were disrupted. Despite these challenges, Core Laboratories continued to execute its key strategic initiatives by advancing service and product offerings and reducing net debt, further strengthening the Company’s balance sheet while preparing for a more active market.

As we enter the next chapter of our proud 87-year history, Core will build upon its strong foundation, expanding its business by introducing new technologies, penetrating new and existing markets, and focusing on shareholder returns. Core Lab will remain focused on meeting clients’ needs through technological innovations and a high level of service and ethics. Client-driven technology advancements will continue to be delivered through our two business segments: Reservoir Description and Production Enhancement (Figure 1). Both segments apply patented and proprietary technologies to solve clients’ problems and anticipate their needs, helping them optimize their reservoirs and maximize their return on investment.

In 2022, the industry embarked upon a multi-year international cycle with elevated activity led by the Arabian Peninsula, South Atlantic Margin, and West Africa. This year’s annual report focuses on the Arabian Peninsula’s renowned oil and gas opportunities. The Arabian Peninsula region is going to play a leading role in this crude-oil development cycle and will account for an increasing percentage of the global crude-oil supply. Core Lab is already well-positioned as a strategic partner for National Oil Companies (“NOC”) in the Arabian Peninsula, providing both services and products through its Reservoir Description and Production Enhancement segments.

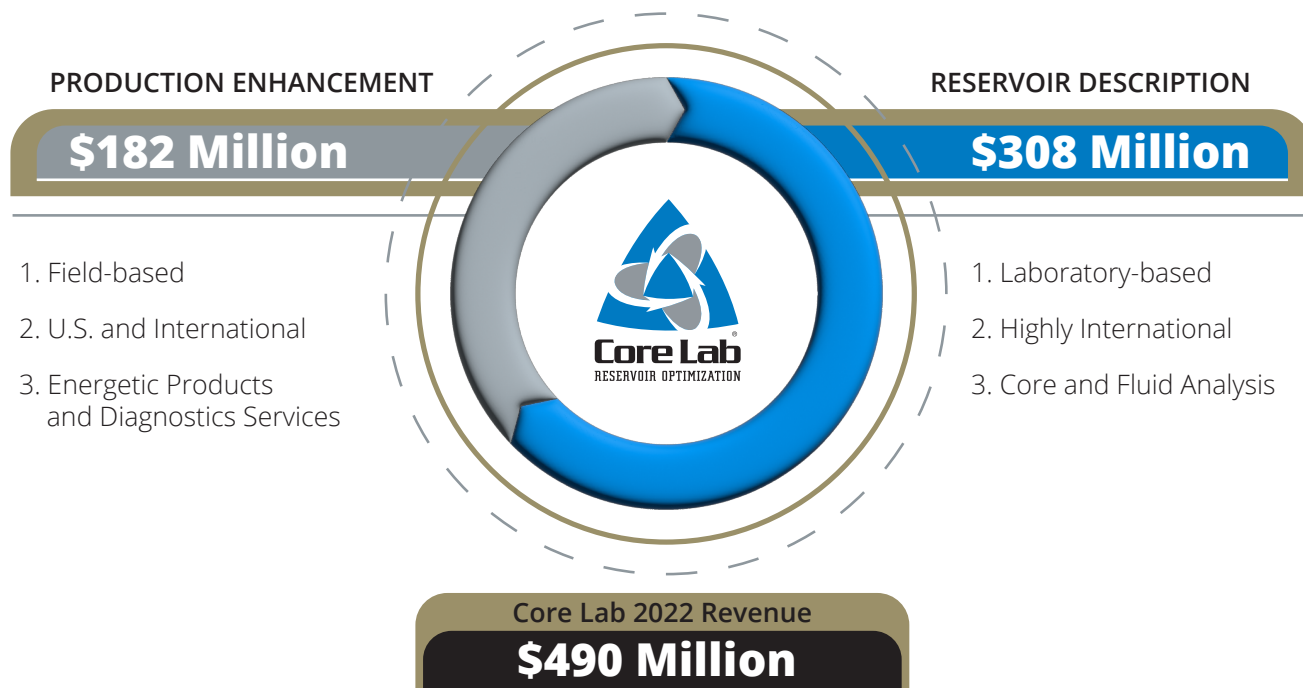


Figure 1 - Reservoir Description and Production Enhancement Business Segments.

# Financial Strategies

Core continues to follow the three financial tenets that management believes will drive total shareholder returns over the long term.

1

## Maximize Free Cash Flow

Core Lab follows a disciplined approach to capital allocation for growing our business. In 2022, despite the challenges that resulted from the disruptions to traditional supply chains caused by the geopolitical conflict between Russia and Ukraine and the continued global pandemic, Core generated approximately \$15 million of Free Cash Flow. This discipline towards capital investments and maintaining an asset-light business model has the Company well-positioned to significantly expand Free Cash Flow as we look forward to a recovering global energy market.

2

## Maximize Return on Invested Capital

Core Lab strives to maximize ROIC through capital discipline and continued execution of our three Growth Strategies:

- 1) Develop New Technologies for Reservoir Optimization
- 2) Leverage Core's International Laboratory Network
- 3) Acquire Complimentary and Strategically Positioned Technologies

We believe that our commitment to this approach will result in superior long-term performance of Core Lab's share price compared with the peer group compiled by Bloomberg. The Company has established an internal performance metric of demonstrating superior ROIC performance relative to the peer group. Core Lab's calculation of ROIC using Bloomberg's formula continued to improve during 2022 and was 7.2% as we exited the year.

3

## Return Excess Capital to Shareholders

Since 2002, Core Lab has returned excess capital to shareholders in the form of share repurchases, warrant settlements, dividends, and special dividends, totaling \$2.7 billion, or approximately \$58.16 per share. During 2022, the Company has been primarily focused on applying free cash towards reducing debt. As energy markets recover and the Company reduces its debt leverage ratio, Core Lab will return excess capital to shareholders via share repurchases and the quarterly dividend.

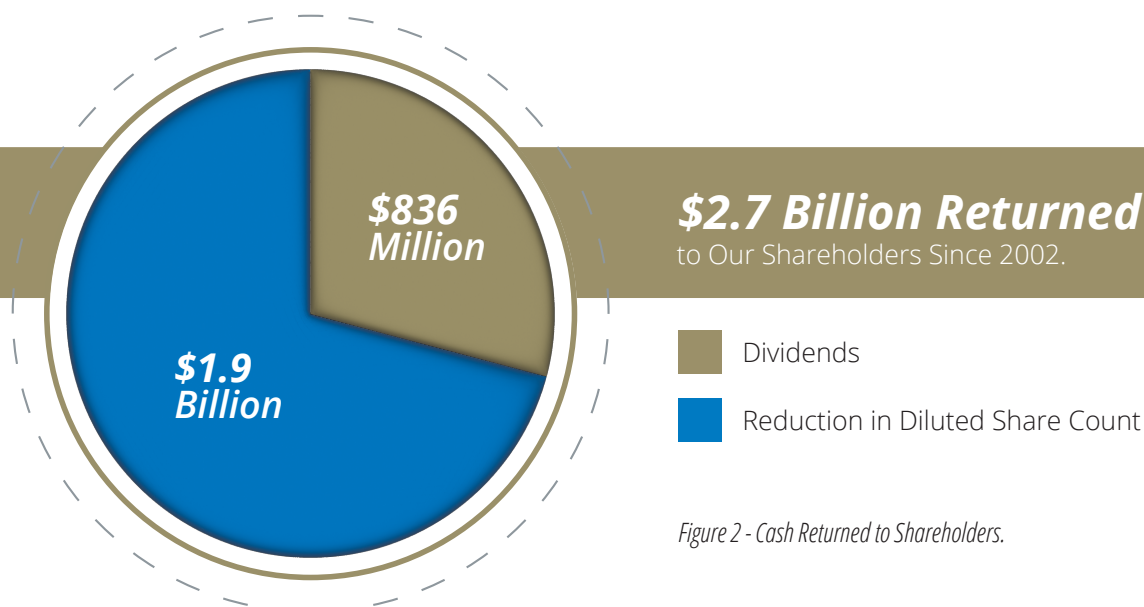


Figure 2 - Cash Returned to Shareholders.



# Financial Highlights

## Consolidated Company Results

(in thousands, except per share data)	2022	2021	2020
Total Revenue	\$ 489,735	\$ 470,252	\$ 487,267
Total Operating Expenses	\$ 393,655	\$ 367,896	\$ 374,767
Gross Profit (loss)	\$ 96,080	\$ 102,356	\$ 112,500
Operating Income (loss) <sup>1</sup>	\$ 41,524	\$ 45,262	\$ (76,805)
Net Income (loss) <sup>1</sup>	\$ 19,453	\$ 19,727	\$ (97,637)
Earnings (loss) per Diluted Share <sup>1</sup>	\$ 0.42	\$ 0.42	\$ (2.20)
Total Assets	\$ 578,354	\$ 580,853	\$ 568,579
Long-term Debt	\$ 172,386	\$ 188,636	\$ 259,433
Total Shareholders' Equity	\$ 188,954	\$ 161,001	\$ 75,573
Cash Flows from Operating Activities	\$ 24,956	\$ 36,579	\$ 57,868
Capital Expenditures	\$ 10,216	\$ 13,539	\$ 11,880
Free Cash Flow <sup>2</sup>	\$ 14,740	\$ 23,040	\$ 45,988
Reduction of Net Debt <sup>3</sup>	\$ (12,725)	\$ (67,103)	\$ (43,286)

1) Operating Income (loss), Net Income (loss), and Earnings (loss) per Diluted Shares in 2020, include non-cash charges of approximately \$133 million associated with the impairment of goodwill, intangible assets and inventory

2) Free Cash Flow is calculated as Cash Flows from Operating Activities less Capital Expenditures

3) Reduction of Net Debt is calculated as the reduction in Total Debt less the change in cash for the same period

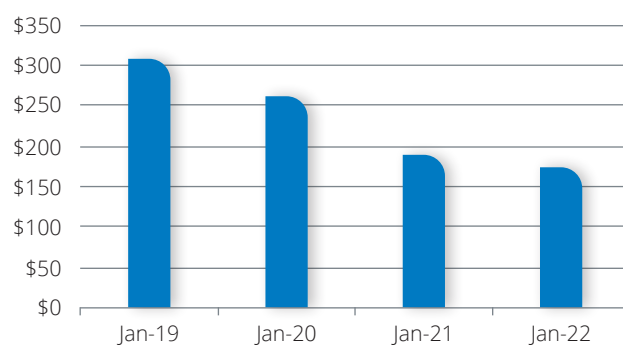
## 2022 Operating Results

The Company faced challenges at the start of 2022 due to both a surge in COVID-19 cases and the conflict in Ukraine. Both events adversely impacted client activity and, consequently, Core Lab's financial performance for the first half of 2022. As COVID-19 cases subsided and global crude-oil trading patterns began to realign in response to sanctions on Russia, the Company's financial performance improved in the second half of the year. For 2022, Core Lab's revenue increased 4%, underpinned by growth in the U.S. land market and new international projects in certain regions. However, Core's full-year revenue growth for 2022 was dampened by the devaluation of the Euro and British Pound when translated into U.S. dollars. Using a constant U.S. dollar exchange rate, 2022 revenue would have been approximately \$13 million higher. In addition, Core's 2022 revenue growth was also impacted by the Russia-Ukraine conflict. Across Core's European, Russian and Ukrainian operations, activity declined due to disruptions in crude-oil trading patterns, causing the Company's crude-oil assay and derived product testing revenue and product sales to decline in excess of \$10 million year-over-year. The combined impact of these currency fluctuations and geopolitical factors adversely impacted 2022 revenue by approximately \$23 million year-over-year, substantially offsetting international growth in other regions. The Company's operating cost also increased in 2022 due to high levels of inflation and the restoration of employee salaries and benefits, which were temporarily reduced during the pandemic. The Company ended the year with good momentum as international activity began to increase demand for Core Lab's products and services.

## Strengthening the Balance Sheet and Capital Allocation

In December 2019, the Company announced its plan to focus free cash flow towards reducing debt, striving to achieve a leverage ratio of 1.5 times or lower. Since that time, the Company has reduced Long-term Debt by \$132 million or 43% despite the operational challenges posed by the pandemic and the Russia-Ukraine conflict. As we look ahead to 2023 and beyond, the macro fundamentals continue to support a growing energy market and we expect the Company's financial performance to improve. Upon reaching our targets in reducing the leverage ratio, we would also expect to become more active in our share repurchase program and begin considering an increase to the quarterly dividend.

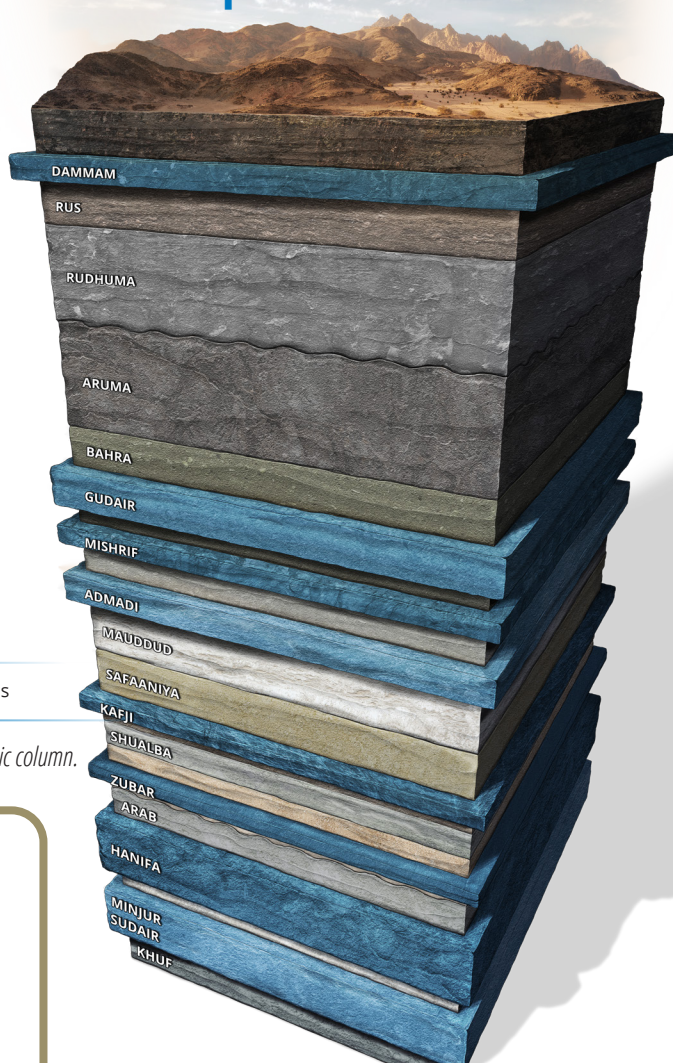
## Reduction of Long-term Debt



# Arabian Peninsula Present and Future Developments

The Arabian Peninsula is renowned for having some of the most significant and productive oil and gas reserves in the world, with geologic systems ideal for forming supergiant oilfields. As shown in Figure 3, the region's stratigraphic column boasts a prolific shale that has sourced hundreds of billions of barrels of oil, sustaining the economies of the Arabian Peninsula countries for decades with conventional resources.

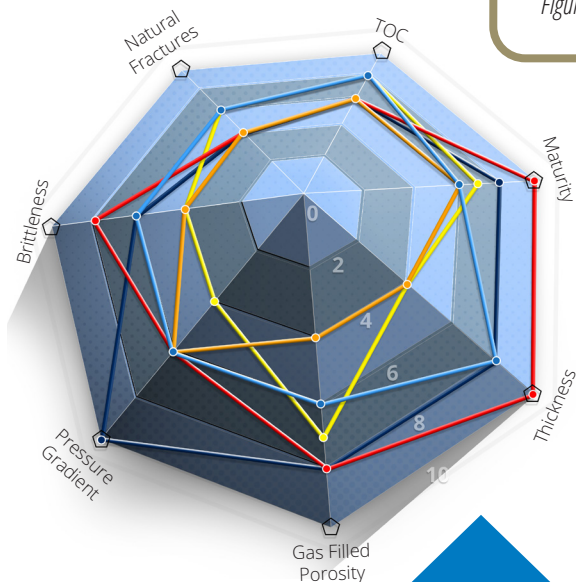
However, with the natural decline of these conventional resources and the increasing demand for energy, there has been a shift towards exploring unconventional reservoir horizons, including tight oil and gas sands, as well as fractured carbonates and shales. With nearly 20 years of experience in unconventional reservoirs gained from our global portfolio of studies, Core Laboratories is a valuable source of expertise and proprietary analytical services for NOCs and regional operators.



Unconventional Formations

Figure 3 - The Idealized stratigraphic column.

## Shale Rock Quality Index (SQRI)

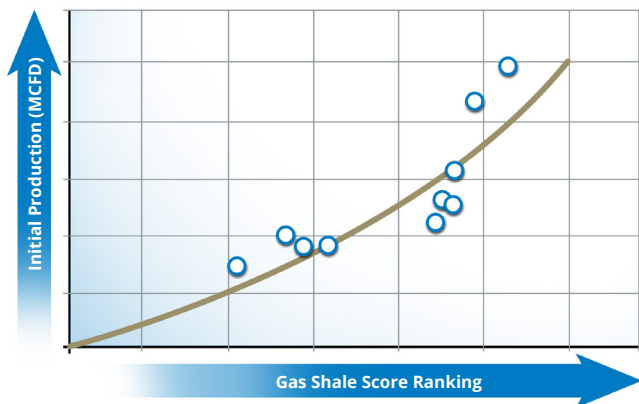


Each colored polygon represents a proven unconventional resource.

To facilitate unconventional exploration, Core Laboratories developed a proprietary Shale Rock Quality Index through the Global Shale Joint Industry Project, providing insight into reservoir evaluation and production potential from analogous shale formations.

Comparing geological parameters, including vertical heterogeneity, formation thickness, total organic content, hydrocarbon maturity, and oil quality, can help identify the most promising source rocks for exploration and production.

As a trusted partner in unconventional exploration and development, Core Laboratories expanded its operations in the Arabian Peninsula in the last several years, as described in the Opportunities Abound Section. With our patented and proprietary technologies, we continue to shorten the learning curve on unconventional exploration and remain committed to sharing best practices and expertise to improve the characterization and production of complex reservoirs in the region.



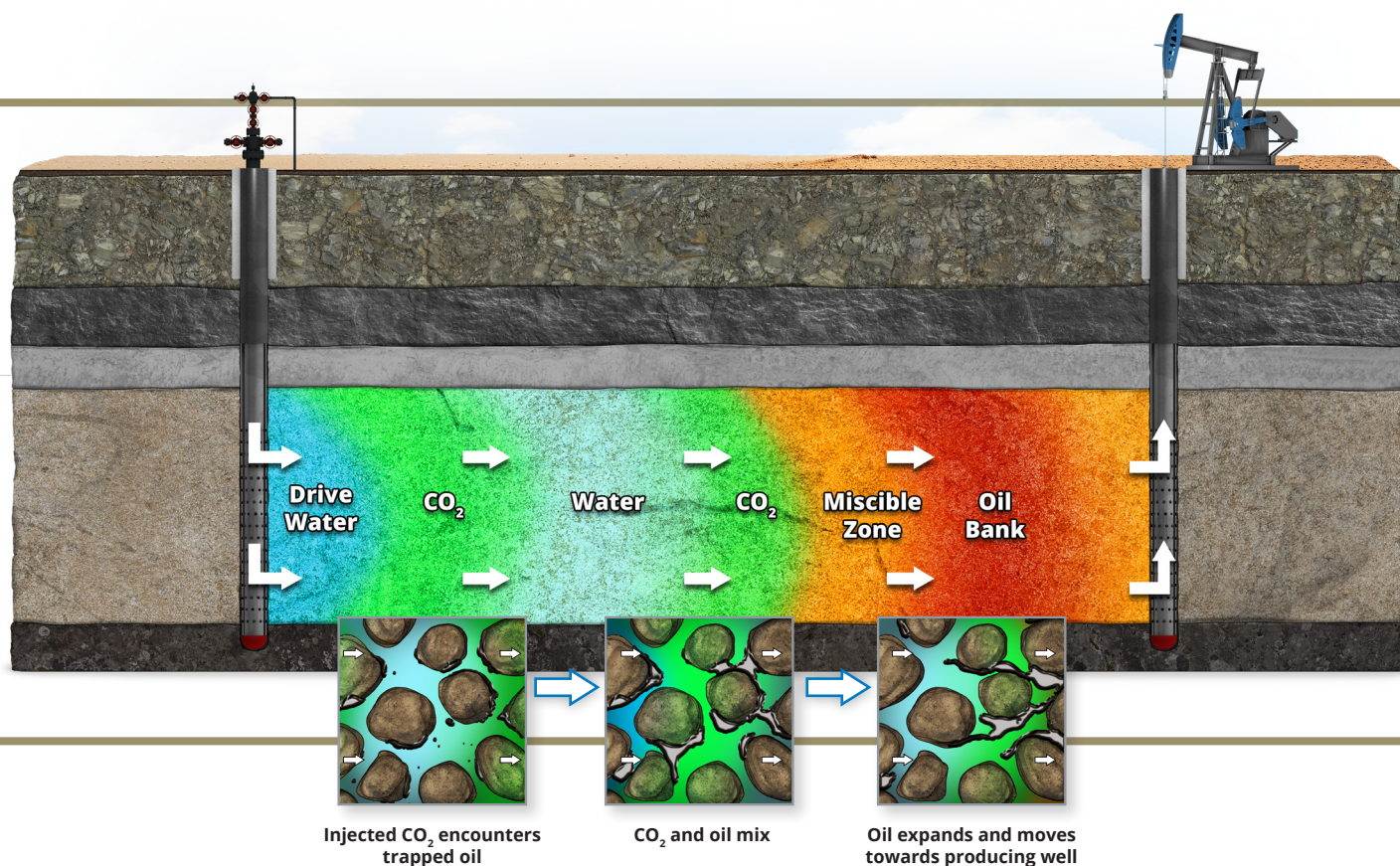


# Arabian Peninsula: Opportunities Abound

## Reservoir Description

During 2022, Core's operations in the Arabian Peninsula were primarily performed by the Reservoir Description segment, providing critical data and data management services for evaluating opportunities in both new and mature fields. Leveraging best practices learned from our global portfolio of conventional and unconventional reservoir studies, we initiated several comprehensive multi-well laboratory analysis programs using proprietary testing methodologies and technologies.

In anticipation of growing demand in the region, Core Lab expanded its reservoir fluids testing capabilities in 2022, introducing proprietary, industry-leading reservoir condition laboratory technologies into new markets. In 2022, the Company was engaged by NOCs to conduct comprehensive reservoir fluid studies, which enabled the operators to model reservoir performance, sustain current production levels, and optimize ultimate hydrocarbon recovery. CO<sub>2</sub> minimum miscibility measurements were used to evaluate potential injection options for both large-scale Enhanced Oil Recovery ("EOR") programs and Carbon Capture and Sequestration ("CCS") opportunities.



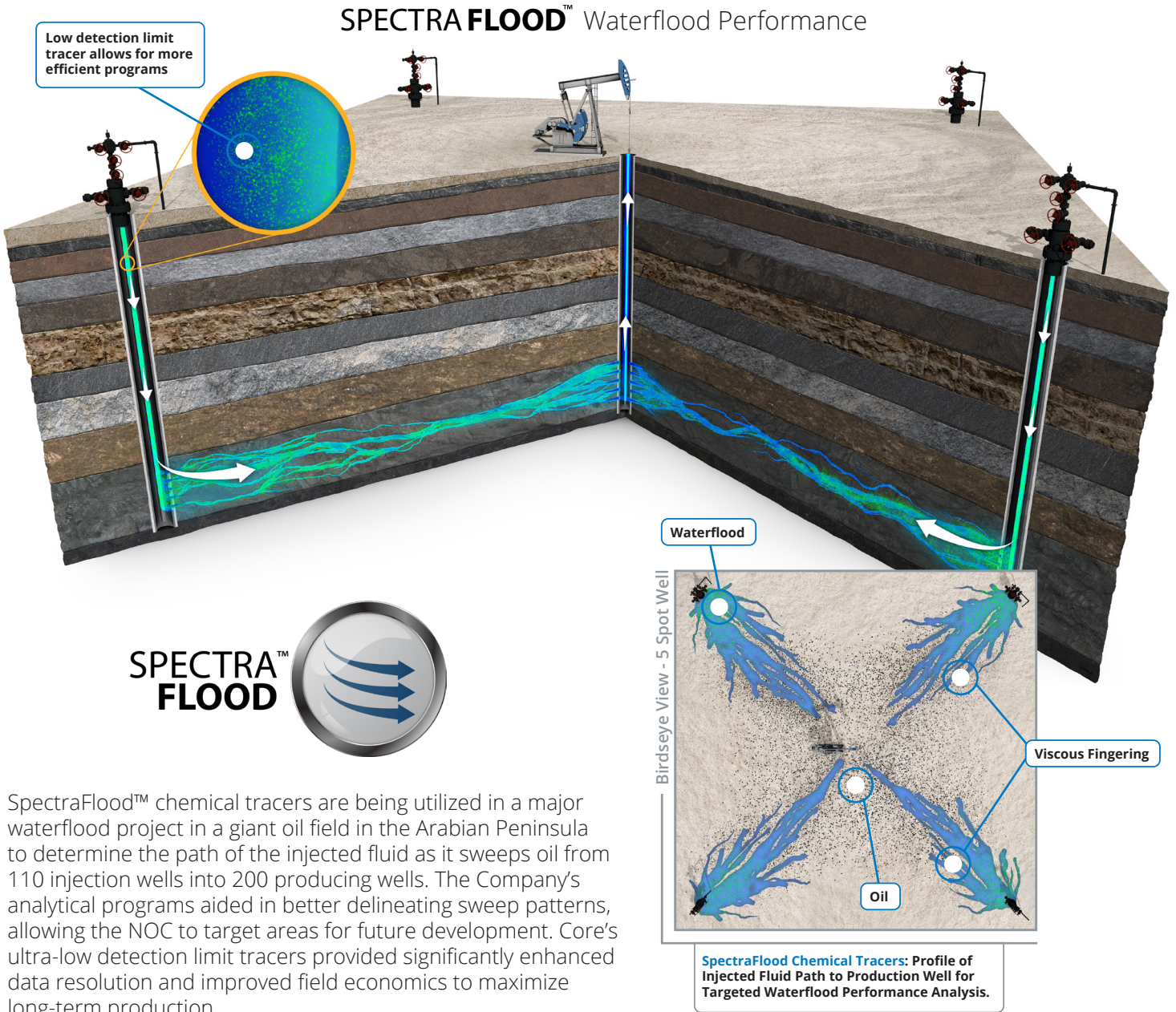
In Kuwait, Core Lab's team of expert Geologists, Reservoir Engineers, and Petrophysicists conducted a week-long core and reservoir data analysis workshop for Kuwait Oil Company ("KOC"). The focus was on understanding hydrocarbon potential and pay recognition in both prospective unconventional and tight conventional reservoir targets. The workshop was the culmination of a multi-year, multi-well analytical program that included analysis of laboratory data, the use of our proprietary web-enabled RAPID™ database, and a detailed fracture analysis of core. Core developed advanced petrophysical log models that included fluid flow and well productivity predictions, which the KOC technical team incorporated into their day-to-day operational decisions. The workshops and deliverables provided improved hydrocarbon mobility assessments and allowed for pressure depletion effects to be incorporated into pressure maintenance programs, thus supporting sustained long-term production.



# Arabian Peninsula: Opportunities Abound - Cont.

## Production Enhancement

In addition to Reservoir Description's laboratory and data management solutions, NOCs in the region are also engaging with Core's Production Enhancement segment to gain valuable quantitative information about their producing reservoirs.



As NOCs in the region lead this multi-year international recovery, Core Lab is focused on remaining a key strategic partner. Core will continue to expand rock and fluid analytical capabilities, while developing technologies to allow more efficient exploration and development of conventional reservoirs and effective exploration of unconventional reservoirs.

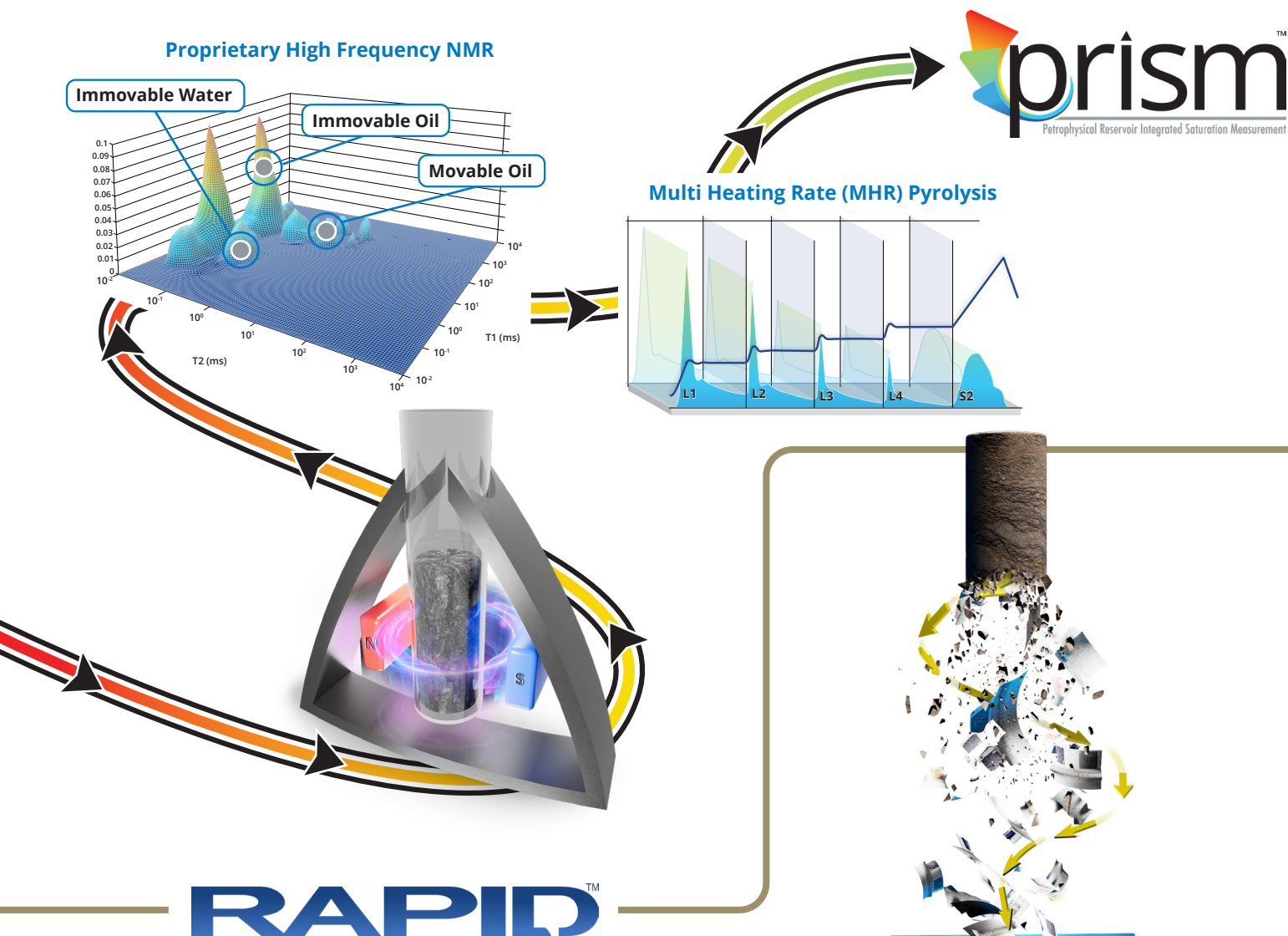




# Core Lab Technologies for Optimization of Arabian Peninsula Unconventional Oil Plays

With the increase in exploration for unconventional reservoirs, NOCs in the region are relying on Core Lab's proprietary technologies and expertise to learn best practices and analytical techniques for characterizing and producing tight reservoirs. Leveraging decades of global unconventional expertise, the Company provides insights into optimizing production and increasing estimated ultimate hydrocarbon recovery.

Core's innovative technologies and workflows, such as its proprietary Petrophysical Reservoir Integrated Saturation Measurement ("PRISM™"), allow for early-time assessment of mobile and non-mobile hydrocarbons. This technology refines petrophysical models and improves estimates of recoverable hydrocarbon. PRISM™ brings together multiple analytical technologies, including proprietary High Frequency Nuclear Magnetic Response ("HF-NMR"), X-Ray Diffraction, and custom rate-controlled pyrolysis to quantify in-situ fluid saturations in tight pore structures.



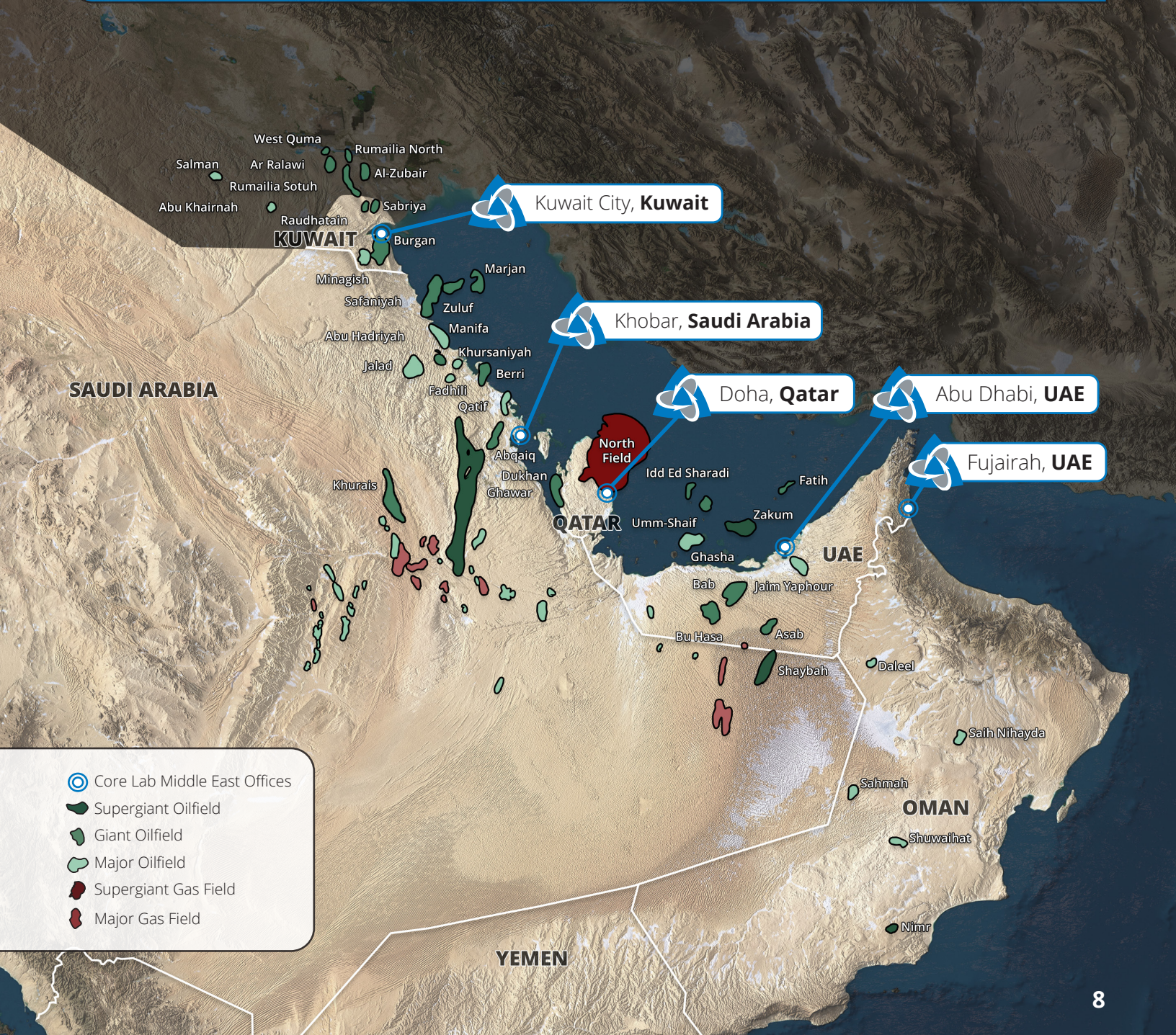
Core Lab's RAPID™ database allows clients to analyze geological, petrophysical, and engineering data in one platform. RAPID™ helps users make informed decisions based on physically-measured laboratory data, and improves prediction of reservoir behavior through proprietary applications. Overall, RAPID™ is an essential tool for optimizing data-driven decisions.



# Arabian Peninsula: Core's Expanding Technologies

Core Laboratories' history in the Arabian Peninsula dates to 1950 with the establishment of its first core analysis laboratory in Saudi Arabia. Recognizing the global importance of the region as the largest oil and natural gas producer, the Company has since expanded technologies and service offerings for both rock and fluids across our facilities in Kuwait, Saudi Arabia, Qatar and the United Arab Emirates. To solidify our position as the leading service provider in the region, the Company will continue to focus on developing innovative technologies and forging new partnerships and collaborations.

As part of Core's ongoing commitment to capturing emerging opportunities in the region, reservoir and fluid analytical capabilities have been expanded and completion diagnostic services have been introduced. The Company completed the establishment of a new reservoir fluids laboratory in Saudi Arabia that utilizes proprietary technologies including full visualization Pressure-Volume-Temperature ("PVT") cells. Technologies specifically targeted at evaluating and completing unconventional reservoirs and CCS opportunities are also being added to our regional portfolio of services and products.





## Bright Future

As NOCs and partnered IOCs in the region shift their focus from conventional to unconventional reservoirs to meet growing energy demand, Core's extensive unconventional reservoir expertise, laboratory network and sustained focus on developing new technologies makes the Company a key differentiator in the Arabian Peninsula.

In addition, with the volatility of energy reliability in Europe, the Arabian Peninsula has potential to become the major source of distillates for the European Market. Core's established inspection and laboratory network in the region is well-positioned to handle increases in shipments and exports.

As the world enters a new phase of energy development, the Arabian Peninsula will play a pivotal role in meeting the world's demand for reliable energy. In addition, as the world shifts away from coal and towards a lower-carbon economy, the region's significance cannot be overstated. Furthermore, Core's advanced laboratory capabilities for both rocks and fluids will play a key role in the region as operators advance CCS projects.

Moving forward, Core remains committed to leading the charge towards a more sustainable future, empowering all operators and partners to meet their sustainability goals with cutting-edge technology and unparalleled expertise.

Our commitment to be the best and most technologically advanced reservoir optimization company in the world continues to be recognized through our high ranking in numerous EnergyPoint Research Oilfield Products & Services Customer Satisfaction Categories:

- 1st in Total Satisfaction for all Oilfield Services**
- 1st in Downhole Completion Equipment**
- 1st in Engineering & Design**
- 1st in Performance and Reliability**
- 1st in Technology**
- 1st in Core and Fluids Analysis**
- 1st in Digital and Big Data**



Now in its 17th year, EnergyPoint Research's survey is comprised of more than 50 questions geared towards identifying features and attributes that drive customer satisfaction. Survey rankings are based upon more than 3700 comprehensive evaluations by qualified respondents across global Exploration and Production companies and other upstream professionals and organizations.



## Senior Corporate Management

**Lawrence V. Bruno,**  
Chairman of the Board and  
Chief Executive Officer

**Gwendolyn Y. Gresham,**  
Senior Vice President, Corporate Development,  
and Investor Relations

**Christopher S. Hill,**  
Senior Vice President and  
Chief Financial Officer

**Mark D. Tattoli,**  
Senior Vice President, Secretary  
and General Counsel

## Senior Operations Management

**Alastair J. A. Crombie,**  
Vice President, Reservoir Description

**Peter W. G. Boks,**  
Vice President, Reservoir Description

**Lesley A. Weisner,**  
Vice President, Production Enhancement

**J. Donald Dumas Jr.,**  
Senior Vice President, Production  
Enhancement and Business Development

**Kevin G. Daniels,**  
Vice President, Chief Accounting Officer

### Independent Auditors

KPMG LLP  
KPMG Accountants N.V.

### Transfer Agent And Registrar

Computershare Trust Company, N. A.  
250 Royall Street  
Canton, MA 02021

### Market Information

Listed on NYSE: CLB US



**Lawrence V. Bruno,**  
Chairman of the Board  
and Chief Executive Officer



**Martha Z. Carnes,**  
Director  
Retired Partner,  
PricewaterhouseCoopers LLP



**Michael Straughen,**  
Director  
Retired Executive Director  
and Chief Executive of the  
Engineering Division  
John Wood Group PLC



**Monique van Dijken Eeuwijk,**  
Director  
Founder MGM Regulatory  
Governance Law Firm



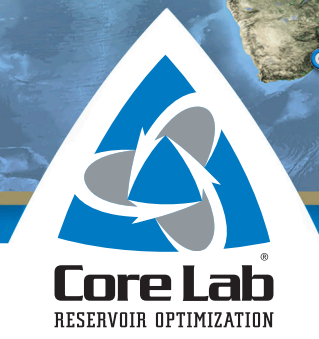
**Harvey Klingensmith,**  
Director  
Co-Founder and Former  
Chief Executive Officer of  
Ajax Resources LLC



**Kwaku Temeng,**  
Director  
Retired Director of  
Upstream Research,  
Aramco Services Company



**Katherine Murray,**  
Director  
Retired Chief Financial Officer  
of Operations, McDermott  
International, Inc.



★ **Advanced Technology Centers**

Aberdeen - Abu Dhabi - Houston - Rotterdam - Kuala Lumpur

○ **Regional Specialty Centers**

Perth, **Australia** - Jakarta, **Indonesia** - Songkhla, **Thailand** - Muscat, **Oman** - Doha, **Qatar** - Kuwait City, **Kuwait** Khobar, **Saudi Arabia** - Alexandria, **Egypt** - Aktau, **Kazakhstan** - Moscow, **Russia** - Durban, **South Africa** Port Harcourt, **Nigeria** - Luanda, **Angola** - Anchorage, **Alaska** - Rio, **Brazil** - Bogota, **Colombia** - Pyle, **Wales** Midland, **Texas** - Denver, **Colorado** - Ciudad del Carmen, **Mexico** - Paris, **France** - Redhill, **United Kingdom**

**Corporate Office**

Core Laboratories  
6316 Windfern Road Houston, Texas 77040  
Telephone: 1-713-328-2673

[www.corelab.com](http://www.corelab.com)

©2023 Core Laboratories - All Rights Reserved