



## UAE Capabilities Overview

### WHO ARE WE?

**Premier Oilfield Group** are an independent company providing laboratory analysis and data generation & evaluation services to the majority of leading oil and gas companies worldwide. Although a relatively new name in the Middle East, our people have been here for over **45 years** and we are part of the very fabric of the region through COREX UK (**now Premier COREX**), who became part of the Premier Oilfield Group in 2016.

### WHAT DO WE DO?

- ✦ We **integrate reservoir rock and fluid measurements** across multiple disciplines to **deliver completions and reservoir solutions** in both **unconventional and conventional plays**.
- ✦ Our goal is to assist our clients **increase their reserves, recover more hydrocarbons, and generate greater financial returns** by enabling more **efficient and more effective decisions**.

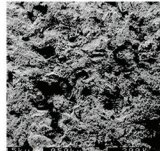
### OUR SOLUTIONS



**CONVENTIONAL & SPECIAL CORE ANALYSIS**



**RESERVOIR GEOLOGY**



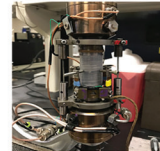
**FORMATION DAMAGE**



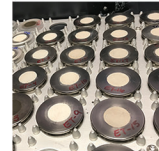
**ENHANCED OIL RECOVERY (EOR)**



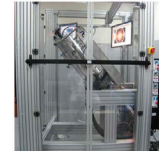
**FLUIDS CAPABILITIES**



**ROCK MECHANICS**



**GEOCHEMISTRY**



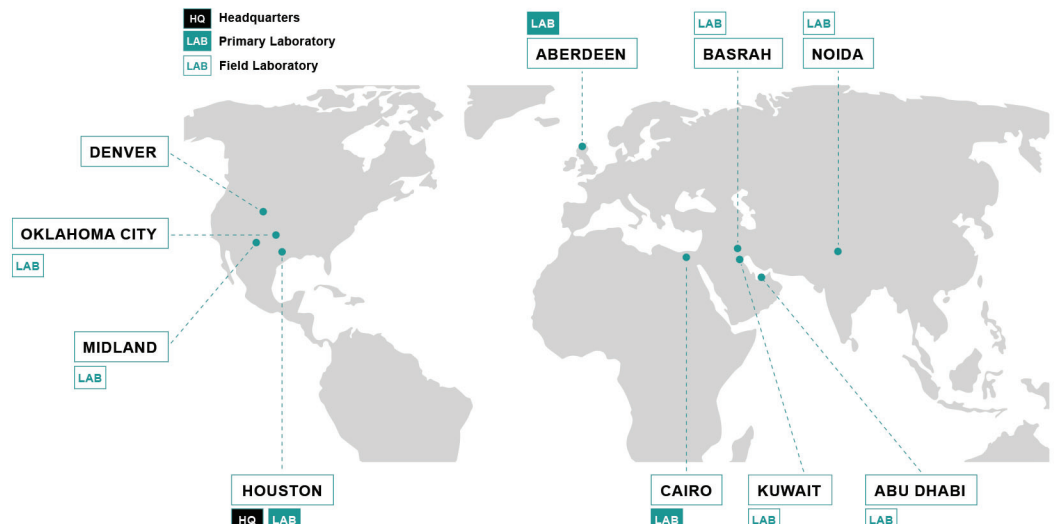
**PVT & ORGANIC CHEMISTRY**

### WHERE ARE WE?

Already boasting the *“Largest Formation Damage facility of its type in the world in terms of people, equipment, experience”* (Chevron) based in Aberdeen, UK, we have recently opened our first Middle East Formation Damage testing facility in Abu Dhabi, UAE to support operators and vendors across the region with drilling and completion solutions.

Our headquarters and primary laboratory facility is located in Houston, Texas with additional USA laboratories located in Midland, Oklahoma City and Denver.

Internationally, we also have centers of excellence in Cairo, Egypt, Al Ahmadi, Kuwait, and satellite laboratories in India and Iraq to service large, long-term contracts.



# Our NEW Independent Formation Damage Laboratory in Abu Dhabi is now OPEN!



▲ UNDOUBTEDLY LEADING THE INDUSTRY IN FORMATION DAMAGE. ▼ - Shell Research



## Recreating the Reservoir in the Laboratory

We have seen increased demand across the Middle East over the last two years to address reservoir uncertainty and help improve hydrocarbon recovery, so it made sense for us to have a set up that could be accessed locally within the region.



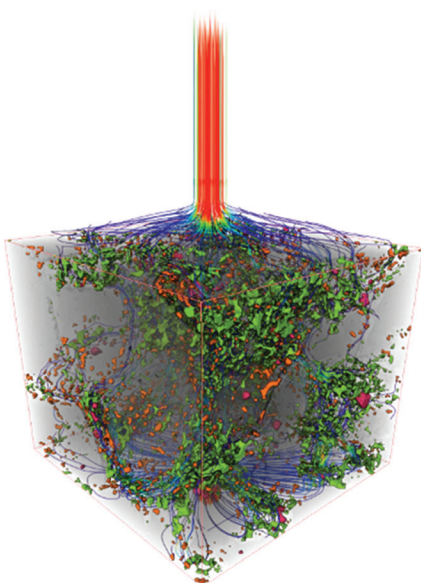
## Improving Hydrocarbon Recovery

Our Formation Damage Group carry out coreflood experiments to simulate planned or previous well operations, understand what has happened or may happen using innovative interpretative techniques, and provide operators information that can be used to maximize hydrocarbon recovery.



## Award winning, innovative and patented technology

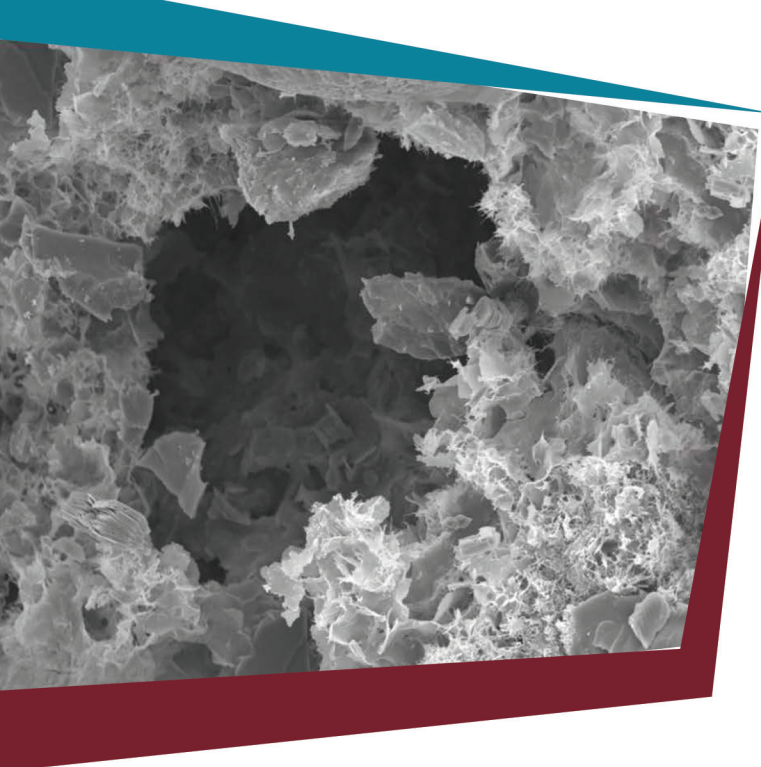
We are proud to bring our niche service offerings to the Middle East with our innovative, patented geological interpretation and quantification workflow. By using digital rock (3D Alteration Modelling) technology on core samples to evaluate operational fluid sequence applications, our novel approach creates 3D models after near wellbore simulations and allows visualisation and quantification of damaging mechanisms. This data can be used to understand the key opportunities for improved hydrocarbon recovery and help with identification of remedial treatments to enhance productivity.



## Solutions Summary

- ▣ Core characterization
- ▣ Drilling fluid, clean up and completion evaluation
- ▣ Productivity enhancement, stimulation and workover evaluation, including acid
- ▣ Injection and disposal water quality evaluation
- ▣ Scaling and scale inhibition evaluation
- ▣ Gas storage/carbon capture & storage
- ▣ Consultancy and Well Review
- ▣ Mercury injection capillary pressure (MICP)
- ▣ Compare and interpret results utilising extensive in-house database of over 2,500+ projects



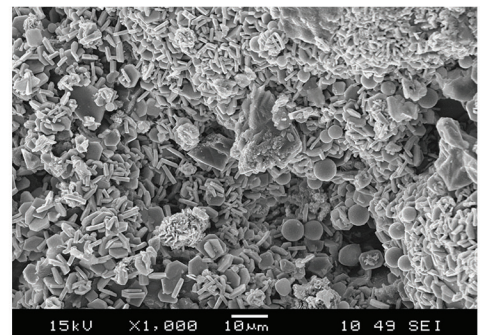
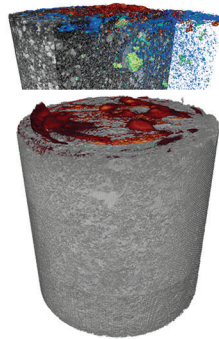
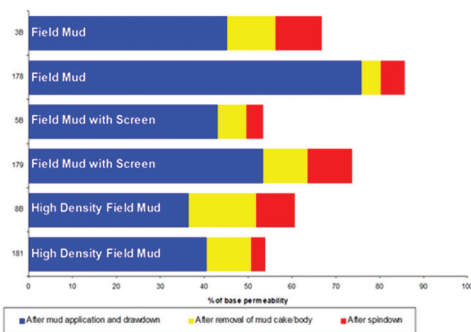


## Why do Studies?



- ▮ **Reduce risk** by gathering information that can be used in operational decisions
- ▮ **Add value to planning process:** laboratory studies are significantly cheaper than experimenting in a well
- ▮ **Calibrate recommendations** made by a vendor by using an independent facility with no conflict of interest
- ▮ **Aid with the selection** of environmentally sensitive fluids in order to meet regulatory requirements
- ▮ **Analytical studies** are direct measurements and observations of potential field mechanisms

## Understanding Results



### WHERE?

- ▮ Permeability
- ▮ Filtrate Loss
- ▮ Pressure/Rate
- ▮ Photography

### WHAT?

- ▮ Micro-CT Scanning
- ▮ 3D Alteration Modeling

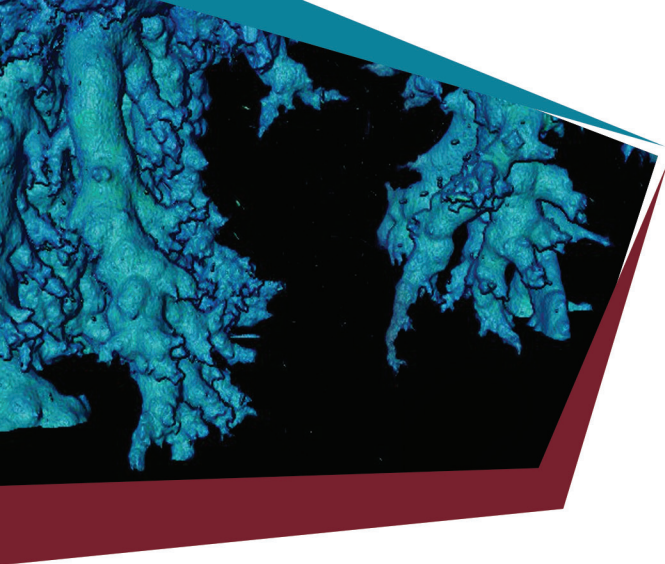
### WHY?

- ▮ Electron Microscopy
- ▮ Thin Section
- ▮ XRD & XRF

Our approach to understanding and identifying damage is based upon us asking the questions “what, where, and why?” and answering them using a range of innovative techniques:

- ▮ **Core flood simulation data** to tell us **what and when** something has happened in terms of **how much** permeability alteration, as well as additional information such as **who’s** product and **how much** filtrate loss volumes and drawdown/production data to aid interpretation.
- ▮ **Micro/Nano-CT scanning** to show us **where how much** and **what** were alterations and their locations within the core samples. As part of this process we can use our patented techniques to quantify the positive and negative change alongside the overall change within a core sample.
- ▮ **Geological analysis** to “zoom in” at high resolution to the changes identified by the Micro/Nano-CT scans and help us understand **why** and **how** there have been changes and **what** to do for improvements.





## Deliverables

- ▣ To aid in selection & pre-screening of fluids & hardware, or to “calibrate & certify” fluids or hardware from multiple vendors
- ▣ Help re-design or re-select fluids and hardware, and then make sure that the new options are an improvement
- ▣ Confirm that treatments or workovers are suitable for the field and do not have any unexpected side-effects

## Why us?

- ▣ **We understand the regional geological complexities across the Middle East** - In this challenging arena, our integrated service capabilities help eliminate uncertainties and recommend solutions at every stage of the well lifecycle
- ▣ **We are unique to the region** - offering world leading testing capabilities for Formation Damage Assessment in terms of coreflooding units, innovative technology and diagnostic tools
- ▣ **We are independent experts** - our impartial advice is used globally to assist in finding potential or existing problems, evaluate operational fluids and hardware, and improve hydrocarbon recovery
- ▣ **We cover all types of rock and fluid** – core and cuttings, conventional and unconventional (we are uniquely capable in low-permeability rock measurements) – as well as fluids and chemistry, both organic and inorganic
- ▣ **Our multi-disciplinary expertise** in rock property measurements, fracturing fluids, and fracture simulation give us an unparalleled ability to advise on all aspects of well stimulation
- ▣ **We utilize our technical experts and industry leaders** across the globe to make recommendations based on our 45+ years of regional industry experience
- ▣ **We work with you and your teams** - to build strong client relationships, we believe in making recommendations and working on collaborative and effective client driven solutions
- ▣ **We innovate** – we are committed to researching and developing solutions for conventional and unconventional reservoirs that will help address both specific client and regional challenges and complexities
- ▣ **We are award winning** – having received both innovation and technology awards as well as focused recognition awards from major global clients

*We have been delivering projects in the Middle East through our world leading international laboratories for nearly 45 years and have already built an excellent reputation that has become part of the very fabric of the region. In recent years we have seen an increased demand across the Middle East to address reservoir uncertainty and improved hydrocarbon recovery so it made sense for us to have a set up that could be accessed locally. We are committed to the region and with our in-country laboratory in Abu Dhabi now operational, we focus on the development of our new facility into a centre of excellence with one of our strategic objectives to increase our in-country value (ICV) and contribute to sustainable growth for us as a company and the region*

**- Bassem Youssef, Vice President, Middle East & North Africa.**



# Our Clients & Awards



-  Commitment to Innovative Use of Research & Development (AGCC) 2016
-  IP100 League Table Top 20 for 4 consecutive years
-  Focused Recognition Awards received from major global clients

## Contact Us

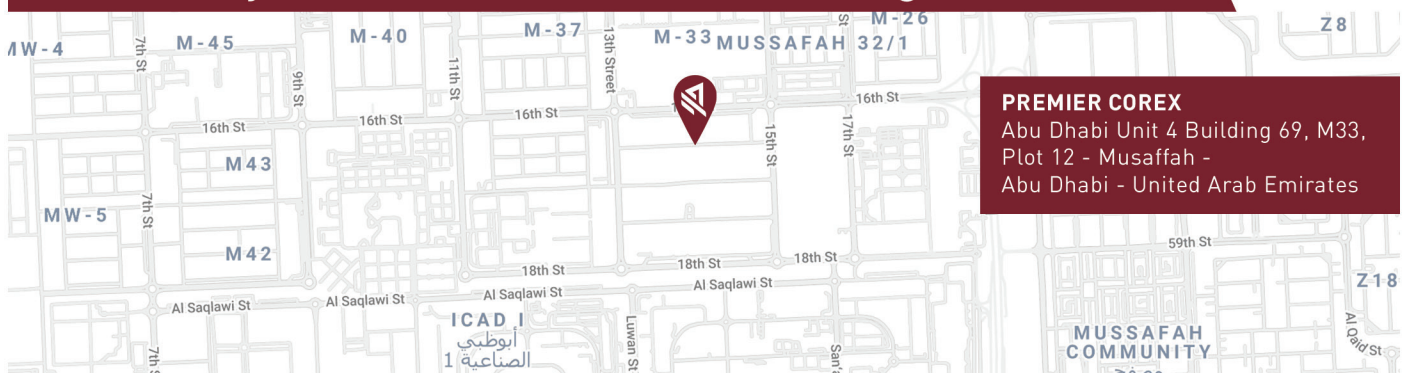


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## Laboratory Location – Contact Us to Arrange a Lab Tour!



**PREMIER COREX**  
 Abu Dhabi Unit 4 Building 69, M33,  
 Plot 12 - Musaffah -  
 Abu Dhabi - United Arab Emirates

Further information is also available on our website:

- [www.POFG.com](http://www.POFG.com)
- [www.POFG.com/AbuDhabi](http://www.POFG.com/AbuDhabi)