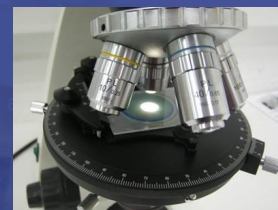


# Analysis

From routine to complex- Scaled Solutions offer a wide range of analytical services to support your requirements



## How our services can help you



### Analysis Services

Scaled Solutions has extensive experience in the analysis of field water samples, production chemicals and oil samples. We offer method development and validation services performed by experienced analysts, plus support services for routine brine and chemical analysis, through a variety of methods including:

- Scanning Electron Microscopy
- Inductively Coupled Plasma Spectroscopy
- Wet Chemical Analysis
- Gas Chromatography
- High Performance Liquid Chromatography
- Optical Microscopy
- Topographic Microscopy
- Residual Inhibitor Analysis
- Oil analysis
- Viscometry & Rheometry



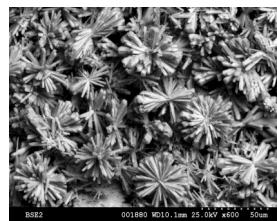
### Analytical Development for Inhibitors

With ever evolving inhibitor chemistries being developed to perform in harsher production environments, Scaled Solutions strive to be at the forefront of the industry and are continually developing new methodologies for analysing residual inhibitor concentrations.



### SEM/EDX

The Hitachi S-260 0N Environmental SEM has a wide range of applications including formation damage evaluation, compositional analysis and



routine scale monitoring in field samples. It provides high quality imaging and analysis through the energy-dispersive X-ray system.

### Method Development

Scaled Solutions offer technical expertise and consultancy on analytical methods for both onshore and offshore applications.

## Key Papers

- Stephen Heath (Baker Hughes), Sarah Jane Ewing, Nicole Hunter, Kirsty MacKinnon, Kelly Whittingham and Gordon Graham, (Scaled Solutions Ltd); “Phosphonate Scale Inhibitor Residual Assay in Multi Component Blends - The Importance of Speciation and the Potential Benefit of TRF techniques”, Tekna Oilfield Chemistry Symposium, Geilo, Norway, March 2018.
- Sarah J. Ewing, Nicole Hunter, Kirsty MacKinnon, Kelly Whittingham, Gordon M. Graham (Scaled Solutions Ltd.); and Stephen Heath (Baker Hughes); “Phosphonate Speciation - Challenges and Solutions”, Paper SPE 190698
- Stephen Heath, Sarah McClenaghan (Baker Hughes); Gordon Graham, Kirsty MacKinnon, (Scaled Solutions Ltd. UK); Paul Mundill, Joonas Siivonen, Satu Tiittanen Aqsens (OY, Finland); “Development of a Novel Residual Analysis Technique for Phosphonate Scale Squeeze Inhibitors to Enhance Scale Squeeze Management in Sub-Sea and Deepwater Wells”, Tekna Oilfield Chemistry Symposium, Geilo, Norway, March 2017.
- Kirsty MacKinnon, Sarah J. Ewing and Gordon M. Graham (Scaled Solutions Ltd.); “New Robust Analytical Development for Sulphonated Polymers in Oilfield Brines ”, Paper SPE 179902-MS
- Stephen Heath, SPE, (Baker Hughes); Gill Ross, (SPE, Shell UK Ltd); Kirsty MacKinnon and Gordon Graham (SPE, Scaled Solutions Ltd.); “The Importance of Scale Inhibitor Analysis in Scale Management – A State of the Art Overview to Provide Cost Effective Scale Control from Simple to Complex Production Scenarios”, Paper SPE-179900

## Truly Independent Laboratory

At Scaled Solutions, our mission is to be recognised worldwide through our independent specialised laboratories as the leading supplier of bespoke equipment, training, consultancy and provider of solutions to challenges in Production Chemistry, Corrosion and Formation Damage.

We aim to exceed our customers’ expectations and improve our service to our customers on a continual basis through our key values: team work & communication, openness & transparency, continual improvement and trust.

Quality, Integrity, Safety and Excellence

### Our Head Office

6 Nettlehill Road  
Houstoun Industrial Estate  
Livingston  
EH54 5DL  
United Kingdom  
  
Tel: +44 (0) 1506 439994  
Fax: +44 (0) 1506 439971

### Our United States Office

Scaled Solutions USA  
12621 West Airport Blvd  
Suite 400  
Sugar Land  
Texas 77478  
  
Tel: (281) 302-5900

### Our Middle East Office

Scaled Solutions LLC  
Showroom B130GF, Plot 29-A  
Mussafah Industrial Area No.41  
ICAD III  
Abu Dhabi, UAE  
  
Tel: +971 2 666 9304  
Fax: +971 2 666 9324

### Our Malaysia Office

Scaled Solutions Malaysia Sdn Bhd  
202001018175, 1374495-K  
Lot 7.26, 7th Floor  
Wisma Central, Jalan Ampang  
50450 Kuala Lumpur  
  
Tel: +60 17 267 1090



General Enquiries: [enquiries@scaledsolutions.com](mailto:enquiries@scaledsolutions.com)  
Website: [www.scaledsolutions.com](http://www.scaledsolutions.com)