

1 1.0079

A

APPLICATION

4 9.0122

D

DISTILLATION

22 47.867

V

VALIDATION

1 1.0079

A

ACTIVATION

14 28.086

N

NOTIFICATION

3 6.941

C

CALIBRATION

5 10.811

E

EVALUATION

4 9.0122

D

DEDICATION

UPSTREAM SERVICES – ADVANCING THE OIL & GAS AND CHEMICALS INDUSTRY



A

APPLICATION

ADVANCING

ONSHORE AND OFFSHORE FIELDS WITH TECHNICAL SERVICES AND SOLUTIONS

ABOUT SGS

SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 64 000 people and operate a network of more than 1 250 offices and laboratories around the world. We are constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed.

We help customers all over the world operate in a more sustainable manner by improving quality and productivity, reducing risk, verifying compliance and increasing speed to market. Our range of services covers all industry sectors and touches the products and services that consumers around the world rely on countless times in their everyday lives.

From the energy that powers our cars and homes, to the food on our plates and the clothes on our backs – and everything in between – SGS provides independent services that make a difference in people's lives. At the end of the day, our value lies in what our services make possible for our customers and, ultimately, for their consumers.

ABOUT SGS OIL, GAS & CHEMICALS (OGC) BUSINESS

We provide innovative services and solutions for every part of the oil, gas and chemicals industry. Our global network of offices and laboratories and

our dedicated team allow us to respond to your needs, when and where they occur. Our reputation for independence, excellence and innovation have established us as the market leaders in providing services that improve efficiency, reduce risk and deliver competitive advantage for you.

Ultimately, every player in the value chain benefits from the innovations and the quality of the products that come from the oil, gas and chemicals sector – everything from transport fuel and heating oil to plastics, fertilisers and pharmaceuticals. Using innovation, and a deep understanding of the global market, we help you in optimising and managing risk.

As the leading solutions provider for the oil, gas and chemicals sector, our robust technology, innovative approach, technical support and dedication to quality and safety bring you tangible benefits, in both the upstream and downstream sectors.

With a wide range of services and solutions leveraging expertise from many areas of the SGS Group, including Oil, Gas & Chemicals Services, Agricultural Services, Minerals Services, Systems & Services Certification, Industrial Services and Environmental Services, we empower you to outperform in today's marketplaces. Risk management, supply chain monitoring and compliance activities are all part of the services we provide that help optimise your business.

UPSTREAM OGC SOLUTIONS THAT LOCATE, ANALYSE AND EXTRACT

Our services for the upstream sector help you locate, analyse and extract oil and natural gas from onshore and offshore fields. From exploration, appraisal and development to production and logistics, we offer a variety of services and solutions that cover the entire upstream sector.

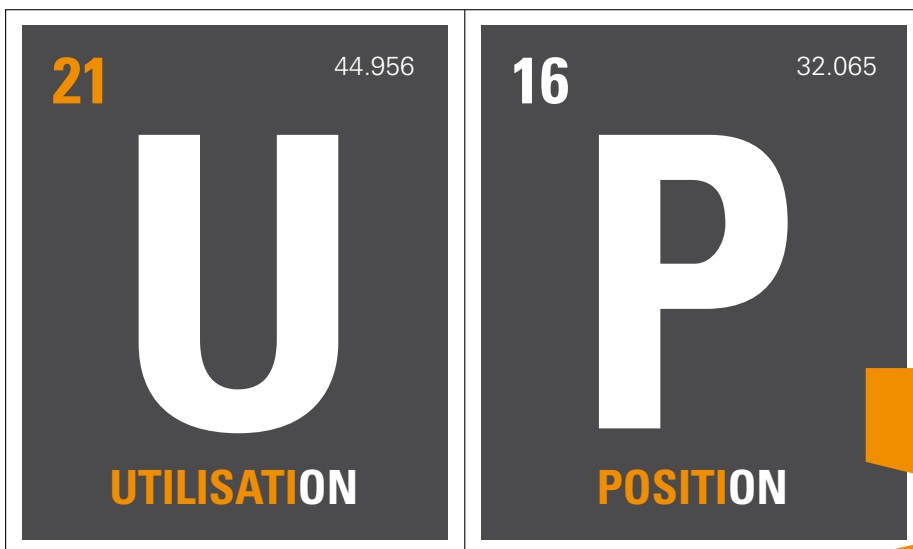
The main focus of our services and solutions in the sector are:

- Exploration, appraisal and development
- Laboratory and metering design and commissioning
- Production operations

Exploration & Appraisal

We provide geological analysis for prospect generation, frontier exploration, field appraisal and development planning:

- Seismic analysis and interpretation
- Geological services such as Reservoir & Structural geology and modelling
- Geo-Analytical solutions including Geochemistry, Optical Petrology, X-Ray Diffraction (XRD), Qemscan and Scanning Electron Microscopy (SEM) analysis
- Petrophysical services to help you design optimal logging, coring and testing campaigns
- Reservoir engineering services for the construction, maintenance and application of reservoir simulation models



UPSTREAM

- Reservoir Fluids analysis using the Pressure-Volume-Temperature (PVT) equipment and other advanced techniques
- Onsite analysis through the use of mobile laboratories
- Oilfield mercury analysis, crude oil assays and profiling
- Well site testing services
- Sample management

Design & Commissioning

Our experience in laboratory and metering design and commissioning allows us to help you by:

- Designing, equipping and commissioning onsite production laboratories
- Providing advice and consulting services on fiscal and allocation measurement and hydrocarbon allocation
- Conducting and producing fiscal and allocation uncertainty studies for both regulatory and contract purposes
- Validating metering systems through acceptance testing either onsite or at the factory
- Conducting factory and onsite calibration using water, gas or hydrocarbons as calibration mediums
- Providing comprehensive project specific or general training on various topics
- Offering production technology services that provide onsite support integrated with geoscience, reservoir and well engineering services

Production Operations

With our expertise throughout all aspects of production operations, we provide drill pipe and bottom hole assembly inspections including:

- Well maintenance
- Wireline and slickline well intervention services
- Well technology services to supply full Field Development Planning lifecycle services
- Laboratory services including technical support, operations management, technical staff equipment and facility rental
- Metering services to accurately measure the amount of hydrocarbons extracted and produced
- Measurement and analytical services necessary to operate hydrocarbon allocation systems
- Technical staffing for production operations
- Storage including CO₂ sequestration, field operations and underground gas storage, and
- Asset Value assurance including equity re-determination, reserve and technical audits, and competent persons reporting (CPR)

TO LEARN MORE ABOUT UPSTREAM SOLUTIONS FROM SGS, CONTACT OGC@SGS.COM OR VISIT WWW.SGS.COM/OGC FOR MORE INFORMATION.

WWW.SGS.COM