



RISEHILL
ENERGY SOLUTION

COMPANY PROFILE

A Technology and Digital
Transformation Leadership
Partner in Oil and Gas
Industry

About Us

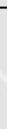
RiseHill Energy Solution is a high-tech development and service firm based in London, UK with footprint in Middle east and South East Asia (Malaysia) specializes in petroleum technique consulting, services, and data analytics to provide ground-breaking E&P solutions focusing on Upstream projects using cutting-edge AI and Machine Learning Solutions.

Our services are carefully designed to cover the life-cycle efficiency improvements in Upstream Projects, organizational management supports, decarbonization Plans, CCUS, Energy Transition, Blue Hydrogen as well as fit-for-purpose Technology application and cost-reduction initiatives in which the services are well-based on the Data Analytics and Go Digital solutions to support your company's Goal, Blueprint and Sustainability Agenda.

The company aims to be a top regional integrated services organization in AI/Data Analytics and is acknowledged for its state-of-the-art technology services specifically in the oil and gas industry.

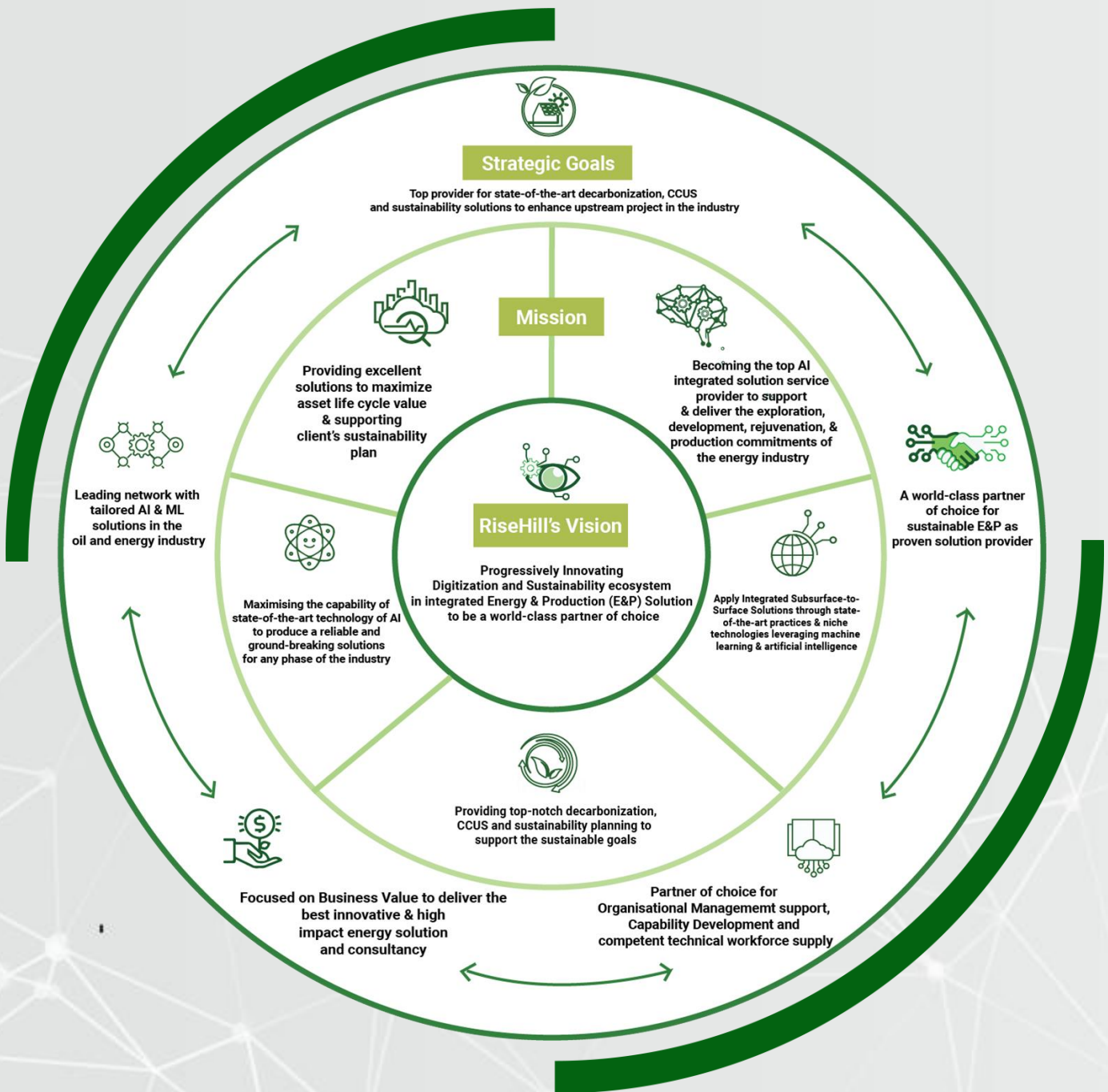


LONDON, UK



KUALA LUMPUR,
MALAYSIA

VISION, MISSION & STRATEGIC GOALS



Our Services

Consultancy

Risehill offers a wide range of services which includes consultancy services covering all petroleum stages, excellent upstream technology partner as well as data analytics. Our experts are capable to harness the power of AI and machine learning for application in the oil & gas industry.



Oil & Gas Industry



Consultancy Services

- Geology
- Geophysics
- Petrophysics
- Reservoir Engineering
- Geomechanics



Upstream Technology Partner

- G&G Cutting Edge Technology
- Drilling Technology
- Well Completion and Production Technology
- Surface Facility and Midstream technology



Data Analytics

- Data Management
- Artificial Intelligence
- Machine Learning

SERVICES

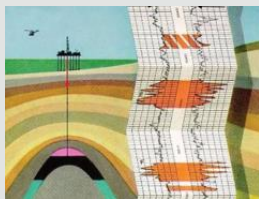
What we can offer

- 01** Digitalization, Artificial Intelligence and Machine Learning Services for Upstream projects
- 02** Decarbonization, Energy Transitioning and Sustainability
- 03** Techno-Commercial Excellence in Upstream
- 04** Organizational Management and Capability Development

OUR SERVICES : Digitalization, Artificial Intelligence and Machine Learning Services for Upstream projects

Production and Hydrocarbon Recovery

Using the power of Artificial Intelligence and Machine Learning together with outstanding knowledge of the petroleum industry, RiseHill Team is capable to facilitate your company for better production recovery planning and how this technology can be used to transform your company to be more data-centric with improved productivity.



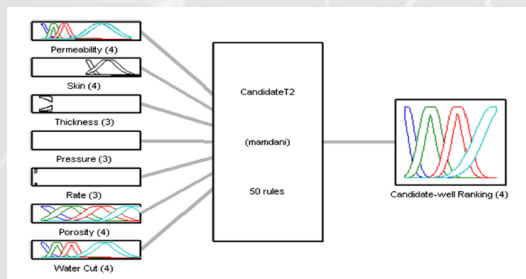
Behind Casing Opportunity (BCO) Prediction

Our sophisticated algorithm would be able to determine and predict the BCO as well as the fluid code of the minor reservoir unit extending the field life during brownfield development



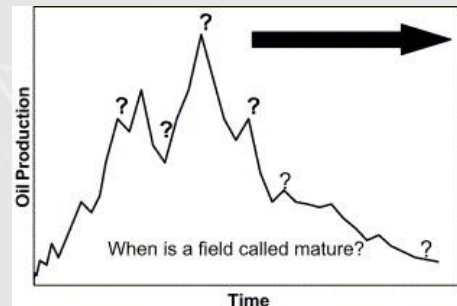
Well Revitalization and PE/IWR

Integrated production enhancement solutions for low performer and idle wells. The solutions covers the wellbore management, productivity enhancement (Rel Perm/Wettability modification), well flow prediction and back-pressure & top side debottlenecking management.



Hydraulic Fracturing & Productivity Enhancement

different rules can be simulated which will produce an output of candidate-well ranking for plausible well decision



Mature Fields & LLAs Management and Operating Models

Cost efficient and fit-for-purpose operational excellence, reservoir management, OPEX reduction and objective-driven surveillance & data acquisition, partial decomm/facility simplification solutions to extend the filed life (Late Life Asset) and enhance value

Production and Hydrocarbon Recovery

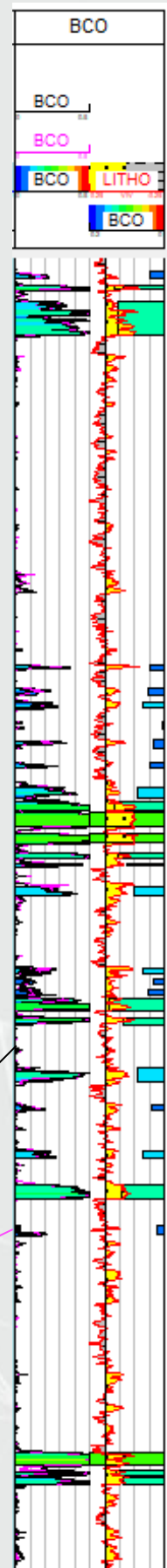
BEHIND CASING OPPORTUNITY (BCO) PREDICTION

Behind casing opportunity (BCO) is defined as secondary objective in oil and gas wells that has not been perforated in early development phases due to techno-commercial constraints. Our sophisticated algorithm would be able to determine and predict the BCO as well as the fluid code of the minor reservoir unit – extending the field life during brownfield development.

Our Algorithm:

- shows good correlation and acceptable results for different scenarios
- could precisely differentiate water bearing sand and tight reservoirs from prolific sections and LR/poor quality units

Actual BCOs vs. Predicted BCOs in black and pink.



Well Revitalization and PE/IWR



In sustaining production of a mature brownfields, providing effective methods is important to improve operation thus extending the life of existing wells. RiseHill is capable to provide various services including technical supports to revitalize clients' existing wells and providing integrated production enhancement solutions for low performer and idle wells. The solutions covers the wellbore management, productivity enhancement (Rel Perm/Wettability modification), well flow prediction and back-pressure & top side debottlenecking management.

Mature Fields & LLAs Management and Operating Models

Shifting the focus towards extending the life of mature fields as well as constructing proper LLAs Management and Operating models for enhancement of company's financial performance can be quite a challenge. In order to provide our client with the best of service to provide excellent solution for the challenge, we are capable to propose cost efficient and fit-for-purpose operational excellence, reservoir management, OPEX reduction and objective-driven surveillance & data acquisition, partial decomm/facility simplification solutions to extend the filed life (Late Life Asset) and enhance financial value.

OUR SERVICES : Digitalization, Artificial Intelligence and Machine Learning Services for Upstream projects

Locked-in Potential Mapping & Monetization (LIP M&M)

ALOP and Gas Injection Opt.

By solving the artificial lift problems, well-rate and gas-lift allocation problems under injection capacity constraint, RiseHill is capable to perform prediction and optimization using our AI algorithm hence demonstrating good efficiency for continuous flow gas-lift operations

Integrated Sand Management (ISM)

Data analytic-based solutions for prediction and managing the active & passive downhole sand management and sand onset predictions as well as the topside and surface sand/fine management

Integrated Flow Assurance Management (IFAM)

Data analytic- based integrated solutions to manage the Wellbore, inner well and topside flow assurance and production reliability related challenges

Integrated Production & Pressure Data Management (IPPDM)

State-of-the-art application of machine learning can be applied to predict missing pressure data as well as flow rate measurement. Additionally, the PDG data can be integrated together with PTA, RTA, DST analysis to efficiently predict the well performance and potential realization.

OUR SERVICES : Digitalization, Artificial Intelligence and Machine Learning Services for Upstream projects

DATA MANAGEMENT, VISUALIZATION AND DASHBOARD



Insightful Dashboard

Provide real-time visibility and greater insight. Role based dashboards providing actionable insights with right information at the right time

3D Advanced Search

Application of NLP for instant browsing of documents from millions of files less than a second that retrieve and full traceability to original documents

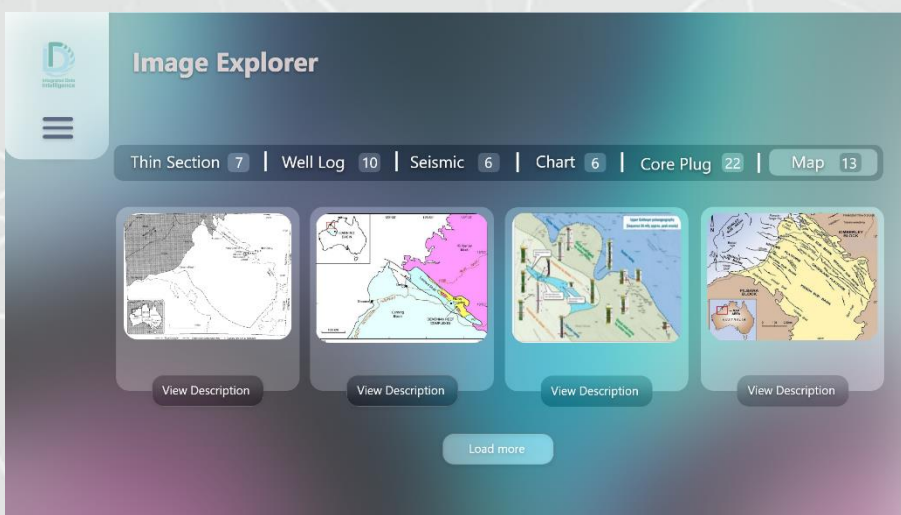
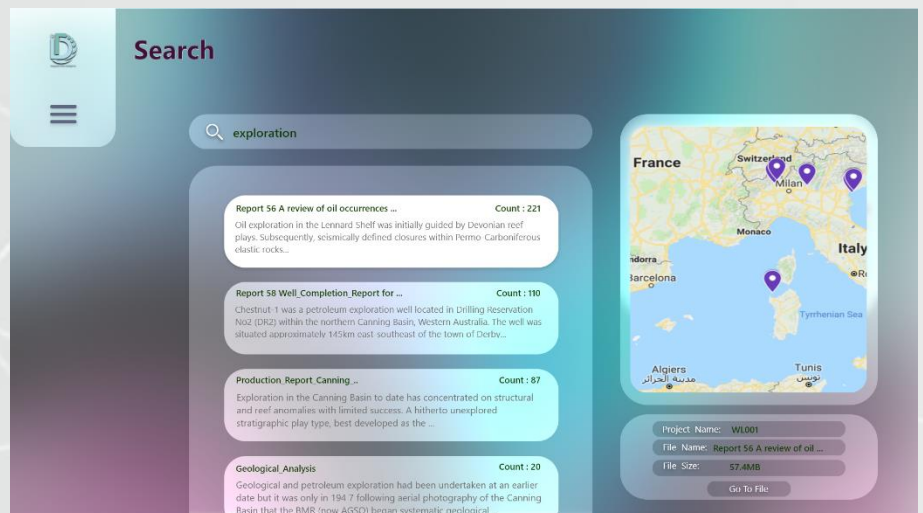


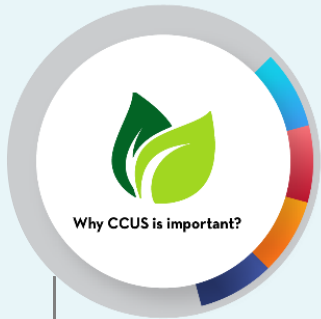
Image Explorer

Using Advanced Machine Learning Techniques in deep convolutional neural network to automatically classify the group of images

OUR SERVICES : Decarbonization, Energy Transitioning and Sustainability

Propelling the oil and gas industry for decarbonization might be a good start to achieve a better sustainable future. Our services which include decarbonization approach, energy transitioning methods and ideas contribution are capable to prepare your company to fulfill the sustainable development goals blueprint to achieve a better future by 2030.

Carbon Capture, Use and Storage (CCUS)



reduce operations impact to the environment



enables monetization and development of high CO2 fields



Operational excellent to reduce venting and flaring



enabling new revenue stream of new business model

Blue Hydrogen



Flaring and Venting Management



Decommissioning and Liability Management



OUR SERVICES : Decarbonization, Energy Transitioning and Sustainability

Reduce your Carbon Footprints with Us:

a) Carbon Capture, Use and Storage (CCUS)

Why CCUS is important?

- *reduce operations impact to the environment*
- *enables monetization and development of high CO2 fields*
- *Operational excellent to reduce venting and flaring*
- *enabling new revenue stream of new business model*

b) Flaring and Venting Management

RiseHill Team is capable to promote several approaches which can be used to decrease gas flaring and as well as proper venting management to achieve zero routine flaring and venting by 2030

c) Blue Hydrogen

What we can offer:

- Experienced experts with outstanding skills and knowledge about blue hydrogen technologies.
- Machine learning application for blue hydrogen which offers low-cost and high confidence level prediction

d) Decommissioning and Liability Management

A proper business plan should be conducted as decommissioning costs quite a budget for the company which can affect the company's financial performance. Not only limited to decommissioning phase, but the entire project run should also be financially-wise planned for a prolific gain for the company.

OUR SERVICES : Techno-Commercial Excellence in Upstream

Technical Excellence

- Field Development Planning
- Brownfield Redevelopment and IOR/EOR Roadmap
- Early Field Development (EFD) and Early Production System (EPS)
- Field/ Reservoir Management/Surveillance Solutions

Management and Operation

- Asset and Value Management
- Opportunity Framing & Production Optimization through Reservoir Dynamic Characterization
- Deepwater Exploration: Dealing with Complex Asset

Contractual and Commercial Services

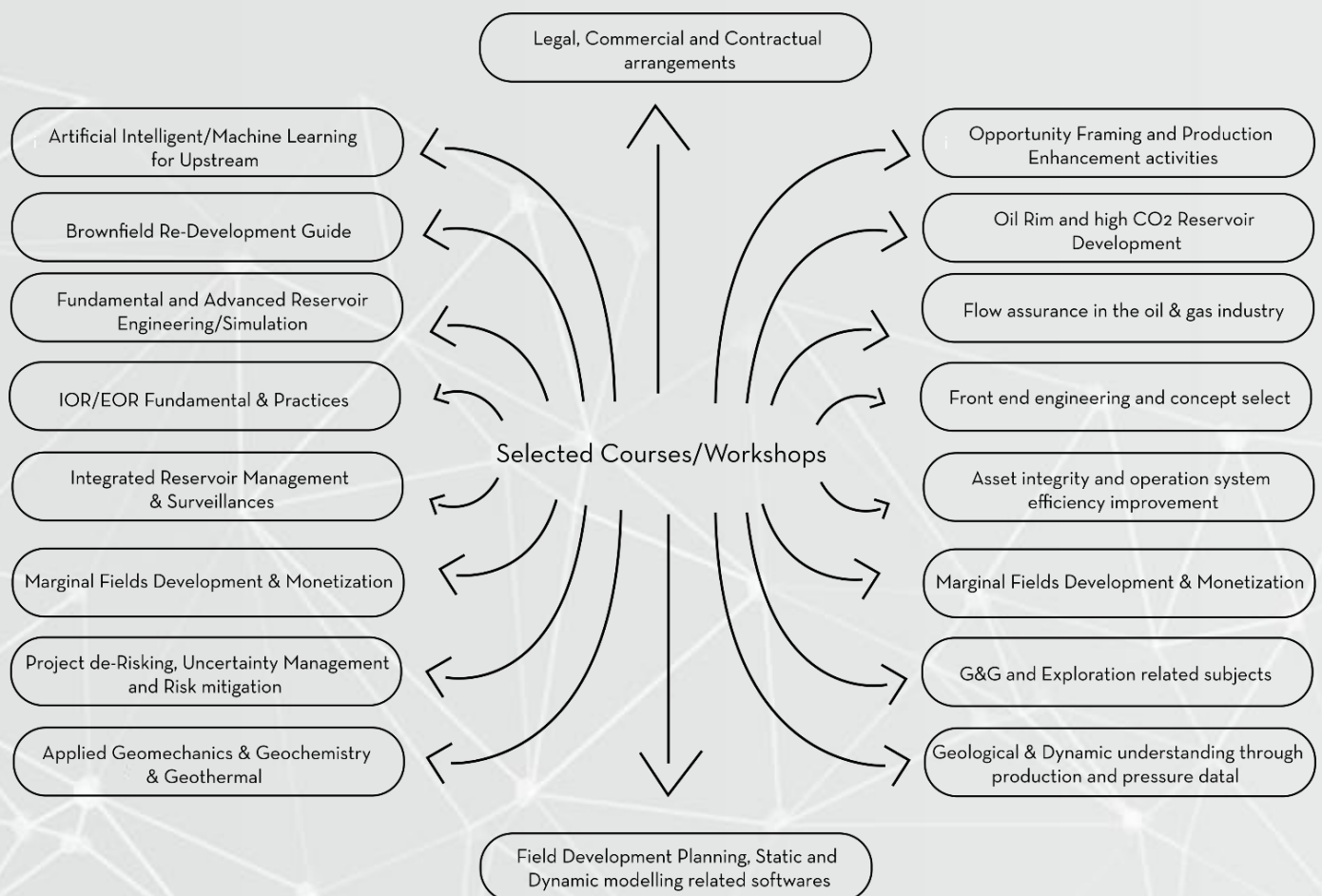
- Holistic Cost Reduction and Optimization
- Cross-boundary negotiation and Redecommissioning
- Contractual and Collaboration Model
- Block promotion and Asset Acquisition

OUR SERVICES : Organizational Management and Capability Development

With broad experiences and expertise, RiseHill provides various knowledge sharing and hands-on-experiences through proven quality training and advisory services to complement its Upstream technical and technology solutions

On The Job Training | Upskilling and Re-Skilling | Complete Growth Model

The courses and workshops are designed to cover from the fundamental to applied and to industrial aspects at different levels of basics, advanced and exclusive. The sessions are designed to cover the best practices, workable solutions and lesson learnt together with numbers of real field examples.



OUR SERVICES : Upstream Technology Partner and Service Provider



Geophysics

- Providing advanced surface and down-hole survey equipment



G&G

- Fluid and rock analysis through partnership with reputable technology provider worldwide.



Drilling & Well Engineering

- Providing drilling fluid, latest directional drilling technology, rotary steerable system, drilling bits, drill pipe and casing materials



Well Completion and Technology

- Providing smart well technology, down-hole permanent and retrievable accessories/equipment, stimulation, surface and down-hole well test technologies, sand control, ESP and GL are the part of the main services that can be provided throughout our upstream networks and technology providers worldwide

LATEST PROJECTS

| | Start Day | End | Client | Country |
|--|-----------|----------|-----------------|------------------|
| Field Development Planning | | | | |
| Provision of Integrated Discovered Resource Assessment for Cluster Ubah; Ubah and Bagang Field's Static Modeling (Beicip-Franlab Asia) | 2022 | 2022 | MPM-PETRONAS | Malaysia |
| Provision of Integrated Discovered Resource Assessment for Cluster AA; A21 and A3 Field Static Modeling (Beicip-Franlab Asia) | 2022 | 2022 | MPM-PETRONAS | Malaysia |
| Provision of Integrated Discovered Resource Assessment for Cluster Chenang; Ketumbar Field Static Modeling (Beicip-Franlab Asia) | 2022 | 2022 | MPM-PETRONAS | Malaysia |
| Provision of Integrated Carbon Dioxide (CO2) Concentration and Risk Mapping Study of Malaysia Resources (Halliburton) | 2021 | 2021 | MPM-PETRONAS | Malaysia |
| Bahregansar 3D Marine Post PSTM Conditioning | 2020 | 2020 | Kish Petroleum | Iran |
| Formation and Reservoir Study for Najmah and Qaiyarah Fields (Northern Iraq) | 2019 | 2019 | Sonangol | Iraq |
| AI & Machine Learning | | | | |
| Application of Multi-output Regression models for Behind Casing Opportunity (BCO) Prediction | Dec-21 | Ongoing | Petronas | Malaysia |
| BCO Prediction, Gas Lift Optimization Using AI/ML (INNOVATEQ) | Jan 2022 | Proposal | MPM- Petronas | Malaysia Oman |
| Integrated Data Intelligent (Data Management) | Jan-21 | Ongoing | IAC | Iran |
| Gas lift Optimization Using AI/ML | Jan 2022 | Ongoing | Ping Petroleum | North Sea |
| Training | | | | |
| Advance Full Field Study | Apr-19 | Apr-19 | PEDEC | Malaysia |
| Depth Imaging | Nov-19 | Nov-19 | NIOC | Iran |
| 3D Geological Modeling | Feb-20 | Feb-20 | | Kish Island |
| Interpretation and Reservoir Characterization | Jun-20 | Jun-20 | NIOC | Iran |
| OBC & OBN (Ocean Bottom Nodes) Survey QC | Dec-20 | Dec-20 | NIOC | Kish Island |
| Oil & Gas Project Management | Dec-20 | Jan-21 | APU | Malaysia |
| QI & Stratigraphy in Carbonate Environment | Dec-21 | Dec-21 | KPE | Malaysia |
| Procurement | | | | |
| 2000 Channels Sercel 408 Ground Electronic | Feb-20 | | OEOC | Iran |
| Line Proportioner, Brass, PL-550 (550 gpm) for 3% Foam | Nov-19 | | GENCEHAN ENERJI | Turkey |

KEY PARTNERSHIP



Leading data science platform based on Gartner Magic Quadrant for Data Science and Machine-Learning Platforms*

**Gartner, 2021*

HALLIBURTON

One of the world's largest oil field service companies, it has operations in more than 70 countries



One of the research institute of Universiti Teknologi PETRONAS specialized in carbonate and basin research



A leading provider of proprietary and patented Reservoir Description and Production Enhancement services



An independent, privately owned pure play seismic processing and imaging company with over 30 years of extensive industry experience



Established in April 2013, Beicip-Franlab Asia (formerly known as BeicipTecsol) is an equity joint-venture entity in between Beicip-Franlab (Paris), PBQ Oilfield (Dubai) and Malaysian partners.



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