GEOLOG offers client-based or remotely-hosted realtime operations support centres (RTOCs) drawing on the company’s industry-recognised global pool of experienced surface logging personnel.

RTOCs allow clients to monitor their wellsite activities on rigs worldwide with a single collaborative team. This promotes efficient sharing of domain expertise for optimal well delivery, as well as creating an effective environment for sharing lessons learned, benchmarking and improving KPIs, establishing and standardising best practices, training and mentoring, and relocating personnel from rigsite to the office.

Benefits

- Scalable provision of realtime domain support
- 24/7 monitoring, collaboration, advisory
- Wellbore construction, geosteering, analytics
- Centralised multi-site monitoring = less POB

Challenges and Solutions

In today’s drilling market Operators are increasingly constrained by the parallel issues of immobile and costly corporate human resources combined with lack of global well delivery experience. As a result, Operators are increasingly turning to established service providers to tap into their global headcount of field-experienced personnel to draw on their well construction expertise, integrated with independent technologies and tools, to fill the gap in drilling and evaluation support. The most efficient means of meeting this demand is with centralised realtime operations support allowing a team of domain experts to monitor rigsite activities on multiple wells simultaneously, collaborate in real-time with both rigsite and office teams, and drive both immediate optimisation and long-term performance improvements through measurement and analysis. Such centalised support also adds human resource value to the onboarding and training of junior client personnel by providing them with maximum operational exposure and variety within in a mentoring environment.

GEOLOG is the largest independent provider of surface logging services with the accompanying expertise of monitoring and supporting well construction activities. As such, GEOLOG has considerable experience in deploying scalable teams of qualified engineers to staff collaborative 24/7 monitoring and advisory facilities anywhere in the world. In partnership with established leading providers of independent well construction optimisation, reporting and analytics software solutions, GEOLOG supports Operators’ own in-house drilling and well engineers with quality-checked monitoring and well delivery process, driving immediate answer products, during planning, daily/ad-hoc while-drilling reviews, and post-well learning and continuous improvement practices.

Applications

- Physical or virtual real-time operations centres, collaborative monitoring and advisory environments
- Resource-, experience- and/or geography-constrained operations support, bespoke well construction challenges
- Supported by vendor-neutral market-leading software solutions as needed for WITSML management, data visualisation, drilling optimisation, geosteering, performance analytics, etc.
A major European Operator established a Real-Time Operations Centre (RTOC) in their corporate head office supporting their drilling activities in USA, South America, North Africa and SE Asia. Such diverse operations presented a wide variety of well construction challenges, both drilling and geological.

To ensure 24/7 operational coverage as well as consistent optimal well delivery, the Operator enhanced their own in-house expertise by staffing their RTOC with experienced GEOLOG engineers bringing domain expertise and real-time data tools to monitor and collaborate with both rigsite crews and Operator’s engineers, as well as developing a consolidated learning environment for the Operator’s junior engineers in their head office.

This teamwork approach quickly proved itself: using sophisticated real-time visualisation and advisory applications, the GEOLOG experts noticed early drilling indications of poor hole-cleaning due to excess ROP. GEOLOG proactively co-ordinated notification processes across both rigsite and office teams, the Operator’s Critical Event procedure was immediately initiated, GEOLOG provided recommended precautionary actions, and optimal well conditions were successfully restored, all while drilling uninterrupted.

According the Operator “historically, the average cost of stuck pipe NPT alone has been $125,000, with potential to exceed to $5m in the event of sidetrack”. Post-event review by the Operator highlighted and congratulated GEOLOG’s role in early detection and resolution of such risk, with the Operator RTOC Manager writing “we take the opportunity to express our appreciation and satisfaction for the quality of the job provided by GEOLOG team in the Real Time Support Centre. We thank the participating team members and look forward to their continued performance, commitment and proactivity for upcoming exploration projects”