

A Methodology to Optimise Land Rig Move

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Abstract

Objectives/Scope: Land rig moves form an integral part of an O&G drilling contractor's business and with the unpredictability surrounding the O&G environment, it becomes ever more important to limit variability in operational performance. As such, the purpose of this project was to outline a methodology to diagnose the current state of rig move operations for a fleet of land rigs and optimize performance through dedicated improvement opportunities. A Comprehensive Optimized process using Time limit methodology along with defined technical limits of each Rig Cluster was prepared by Keeping HSE as priority & introduced Checklists for Critical Rigmove tasks for proper validations & HSE controls.

Methods, Procedures, Process: Using the Time Limit Methodology, Our Rigmove Process was broken down into Micro KPI, s against each Steps. Technical Limits of Each Rig was identified based on Rigs OEM Clusters. The approach adopted centers around an understanding of the combined role of People, Process, and Equipment, and consists of three main phases: 1) Conduct current state assessment and identify improvement opportunities 2) Pilot improvements on select rigs 3) Refine improvements and scale across the fleet. The main finding of this exercise is that performance variability is caused by process control rather than by changes within the rig move process itself. As such, improving planning and coordination, especially during the days leading up to rig release, will have a significant impact on rig move performance. Lastly, the presentation will also touch upon some digital opportunities that can be implemented to realize further improvements in rig move performance. End to End functionality of Rig Move as mentioned below Build up the SAP system for carrying out the Rig Move Management comparison of the following stages and activities: • Rig move notification • Road Hazard Survey • Rig move plan initiation • Rig move meetings and decisions and approvals • Rig move gear assignment • Rig move Release • Rig move acceptance

Reports, Results, Observations, Conclusions: • Reducing NPT or time saving by improving planning and coordination of rig move activities. • Rig Move Digitalization o Minimum data maintenance o Auto mail generation Validation checks stopping further processing if conditions are not met. o Auto calculations o Workflows and email notifications o Built in Approvals and release process o One DB for all Forms and reports & storage of documents o More discipline in operations o Real time data, report and monitoring for optimizing costs Tracking the process and status with automated reports via email.

Novel/Additive Information: • Rig Move Handbook including specific rig move planning tools • Continuous Improvement Handbook including performance management tools, were the consolidated payoffs developed end of this project to be utilized in future for Sustainability of improved performance.