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**DRILLING MUD CLEANING SYSTEM MUDCUBE TECHNOLOGY IMPLEMENTATION
FEASIBILITY STUDIES BY UKRAINIAN OIL AND GAS SERVICE COMPANIES**

Chmykhun F.R., assistant, **Diachenko A.O.**, student
National University «Yuri Kondratyuk Poltava Polytechnic»
Chmykhun@nupp.edu.ua

Actuality of improving the cleaning of the drilling mud system by service companies of Ukraine directly depends on the efficiency of the organization of the production process: technological and financial components.

The purpose of this study is to highlight the main key advantages of the latest drilling mud cleaning technology «Mud Cube» and the feasibility of its implementation by oil and gas service companies in Ukraine.

Ukrainian oil and gas service companies, in competition with international drilling contractors, aim to conduct production activities as efficiently as possible with existing equipment and in the medium term to implement high-tech solutions.

The MudCube is the first fully enclosed, lightweight solids control system for use with all types of drilling fluids. It replaces the traditional shale shaker as Derrick FLC, Mongoose PT and etc. with shale shakers screens, but uses only one tenth of the G-forces which includes the generation of original in the filtration hydrodynamic process. The MudCube is new solids control technology separates all types of drilled solids from liquids by using light micro vibration combined with high air flow through a rotating filterbelt. This results in improved performance, reduced waste and CO₂ emissions, and promotes a healthy working environment. The screens of Mud Cube is also confirmed to the standart API RP 13C.

Traditional shale shakers: get bigger mud loss; more noise and vibration; Extensive exposure to mist and vapour. VS MudCube: Drier cuttings; Less waste; Improved HSE conditions. The power of the MudCube has been demonstrated in the field time and time again. That's why drilling service companies replacing shakers with MudCubes. Some of the most important replacement reasons include: Reduce mud losses by 30-40%; Reduce drilling waste mud weight by 30-40%; Better LGS control; Improve mud quality; Filter belt per MudCube, replacement time 3 minutes. Reduced Drilling Fluid Costs: Proper solids control reduces the need for additional drilling fluids, a significant cost driver in drilling operations. Health, Safety, and Environment: No exposure to fumes, extreme vibration or excessive noise; Safe cuttings monitoring for geologists.

In conclusion advanced solids control technology of MudCube Cubility are essential for reducing operational costs in the oil and gas industry. From shale shakers and desanders to centrifuges and degassers, the right equipment and techniques can save money, enhance operational efficiency, and minimize environmental impact. By investing in the latest solids control technologies, companies can optimize drilling fluid quality, protect their equipment, and ensure compliance with environmental regulations. Ukrainian service companies is committed to providing comprehensive mud cube solids control solutions to optimize their cost-saving goals. With our analysis of feasibility studies in management and solids control, we ensure that new technology of MudCube techology is efficient, safe, and sustainable in prospect of driving to the level of International Oil and Gas service companies.

Refences:

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