



TEMS International is an independent provider of environmental management and compliance services to the global oil and gas industry. Our services are focused on managing and optimising drilling performance and drilling waste in real time, while ensuring an asset remains in environmental compliance. Ultimately, our experienced team aims to reduce drilling costs and ensure legislative compliance targets are met or exceeded.

- Location: **Gulf of Mexico, United States**
- Project date: **March – December 2019**
- Drilling duration: **252 days**
- Total footage drilled: **17,680ft**
- Total estimated saving: **\$322,672.24**
- Estimated SBM savings: **1,700 barrels**

OUTLINE

TEMS International was contracted by an independent exploration and production company to support the drilling of a well in the Gulf of Mexico. The project, which commenced in March 2019, lasted for 252 days, during which time TEMS International engineers oversaw more than 17,500ft of drilling.

TEMS International provided its drilling performance management and optimisation, and continuous environmental compliance legislation services during the project. These services were delivered without using secondary processing equipment such as cuttings dryers.

Prior to the project commencing, TEMS International engineers conducted an extensive audit to identify potential issues regarding the operation of internal valves; missing protective guards for emergency stop buttons; the need for regular hose inspections; and the introduction of weekly spill drills. The noted issues were resolved prior to and during drilling operations, depending on their seriousness.

The overall aims of the project were to:

- Achieve governmental oil on wet cuttings (OOWC) limitations in line with EPA reporting
- Optimise solids control equipment to deliver maximum solids removal with minimum liquid retention
- Reduce synthetic based mud surface consumption
- Reduce shaker screen consumption
- Minimise environmental impact

SERVICES DELIVERED

Drilling performance management and optimisation

A process approach to drilling performance management that adds value to the entire drilling process. The service aims to ensure more effective and efficient drilling – reducing drilling days – through optimised fluid management and effective solids control management with the overriding proviso of safety and environmental protection.

Continuous environmental compliance legislation

Leading guidance on environmental compliance, prior to and for the duration of a drilling campaign. The comprehensive technical services and environmental consultancy enable well planners to ensure permits are in place, and that drilling operations keep pace with, or exceed, the evolving compliance regulations of drilling locations.

1,700+	Fewer barrels of mud used
\$322,672	Saved on mud costs
3.55%	Average ROC rate achieved
Spill drills	Introduced to train rig personnel
No dryers	Used onboard the rig, reducing carbon footprint