

Kick monitoring system helps client avoid 22-barrel kick in Houma well

Innovation in action

A client drilling in Houma, La. was interested in using the Kick Monitoring Display system to view the flow for several connections on one screen. Even though they were not expecting one, our kick monitoring system notified the client of a kick, which allowed them to take appropriate measures and avoid a hazardous situation.

Our Kick Monitoring Display system exceeded the client's expectations, providing an early detection for a well-control event even though they were drilling in a formation that had not previously experienced kicks.

Technology

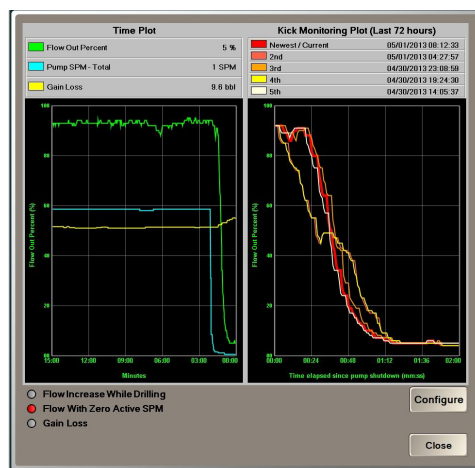
NOV's Kick Monitoring Display system operates within our rigsite information systems to monitor well conditions and provide real-time indications of a potential kick or fluid loss situation. Our client was specifically interested in the system's notification capability, which sends special global alarms to workstations on location when it senses unexpected mud returns during specific rig operations.

Performance

The client did not expect any kicks at the depth they were drilling, but they were aware of other companies experiencing kicks when wells were drilled to a deeper depth in the formation. The customer initially ordered the Kick Monitoring Display system because they wanted the rig to review the mud flow returns for the last several connections. The NOV Kick Monitoring Display system is not only designed to provide our clients with an intuitive trend overview of mud flow returns, but it is also designed to watch for abnormal mud flow returns during drilling, tripping and other rig operations where early kick detection is vital.

Results

During a connection, the Kick Monitoring Display system caught an unexpected 22-barrel kick 20-30 minutes early and notified the client via a unique global alarm that distinguishes the alarm from all other alarm activities. During a kick alarm event, a kick monitor screen with concise, relevant information is displayed on all appropriate rigsite workstations, empowering our clients to make well-informed decisions and handle a potential uncontrolled flow event effectively. At the alarm's notification, the rig crew was able to quickly initiate well-control procedures that successfully controlled the kick. The client was very pleased with the performance of the Kick Monitoring Display system, stating, "This is a great safety feature that can alert everyone with a workstation on the rig even though their alarm limits might be set too high. I believe they call this a "global rig alarm." I am here to tell you that this Kick Monitoring Display works. I am glad that I had it and will use it again."



The kick notification dialog displays an intuitive and instant trend overview of flow conditions when a kick alarm is triggered.