Case Study

Shaker Hawk reduces NPT and maintenance costs in West Texas

Remote data analysis reveals the electrical issue

Case study facts

Location: Permian Basin

Customer: Confidential

Results:

- Remote diagnostics saved non-productive time
- No on-site diagnostics reduced maintenance costs
- Optimized shaker performance

Background

Solids control shakers are constantly in operation, making it challenging to find opportune times to conduct service maintenance on this equipment. An operator had three BRANDT™ King Cobra Venom™ shakers with Constant-G Control™ (CGC) operating in the Permian Basin. One of the shakers began intermittently turning off, and the service technician was a few hours away. Adding a load to the shaker caused a high spike in torque, shutting down the shaker. The over-torque situation was initially believed to be caused by a bearing issue.

Solution

The BRANDT Shaker Hawk™ is the industry's only remote shaker monitoring system, providing real-time and historical operations data for performance, efficiency, and maintenance optimization. Using Shaker Hawk, the NOV Technical Services team was notified instantly of the shutdown. While our technician was en route, remote analysis of the torque and amps data enabled us to determine an electrical issue—a loose connection—caused the high spike in torque.

Results

By the time our technician got to the wellsite, the problem had been identified, eliminating costly and time-consuming on-site diagnostics. The technician quickly fixed the loose connection, and the shaker returned to normal operation. As a result, the operator saved non-productive time (NPT) and maintenance costs.

In addition, data from Shaker Hawk showed us the operator was not fully using the CGC system. CGC detects load increases on the shakers and increases the G-force on the motors, improving the shaker's processing capacity. Optimized shaker performance reduces drilling fluid costs. We educated the operator on how all the systems work together to offer guidance on any disruptions.