



RIGOR

Powered by Check-6



Case Study: Consistent Performance Results During Drilling Operations

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In today's highly competitive upstream market most operators measure every aspect of the drilling contractor's performance. Efficient drilling operations are rewarded with long-term, stable contracts. Those who cannot demonstrate efficiencies often find their rigs stacked in the yard, losing millions annually in lost revenue.

Challenge:

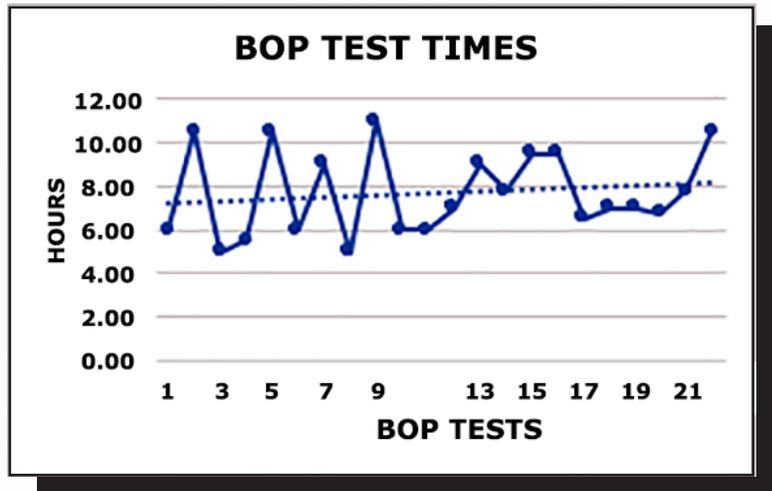
A major Middle East operator invited Check-6 to demonstrate how, using a digital checklist system, a drilling contractor could improve operational performance and reduce inconsistent performance. A global drilling contractor with 36 Rigs under contract volunteered to host this demonstration.

The drilling contractor selected BOP testing as the operation and then a specific Rig known for its inconsistent BOP test performance. We'll call this Rig X. To accurately measure improvement, Rig X's BOP test performance data over the past 12 months was collected.

Rig X completed 22 BOP tests over that period:



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- Average BOP test time was 7.67 hours, or 2.67 hours above the KPI goal (Key Performance Indicator) of 5 hours.
- BOP test performance was inconsistent as demonstrated by the standard deviation of 1.94.*
- The KPI goal twice, or just 9% of the time, over those 12 months.
- Trend line in the above graph shows test performance getting worse.

Standard deviation is a number used to tell how measurements for a group are spread out from the average (mean) or expected value. A low standard deviation means that most of the numbers are close to the average. A high **standard deviation means that the numbers are more spread out.*

Actions:

The digital checklist system demonstration consisted of 3 BOP Tests on the same 13-5/8-inch 10M stack over a 6-week period. Check-6 developed a BOP Test digital checklist based on the drilling contractor’s procedures and input from their subject matter experts. BOP Test performance was measured using the identical test plan of the previous 22 BOP tests.

Results:

- Rig X average BOP test time while using RIGOR® Digital Checklist System averaged 5.88-hours. This is a 1.89-hour reduction from the previous 12-month average, or a 24.6% performance improvement.
- BOP test performance standard deviation decreased from 1.94 to 0.79, meaning the time was more consistent.
- Rig X completed one BOP Test below the 5-hour KPI just one month after recording a BOP Test that exceeded 10-hours (a 50% performance improvement).

"In a volatile, uncertain and complex market, Check-6 and RIGOR® ensure lasting results and help position an organization ahead of the competition."

RIGOR® has the capability to create checklists with high levels of granularity and scalability. Checklists can be written in a number of very focused ways, depending upon the information important to the client. In this case, the checklist was broken down by tests; 1 thru 8, with graphics detailing each test setup along with written steps.

Finally, using a digital tool like RIGOR® demonstrates to your customers that you are committed to a higher level of operational discipline. The results of this demonstration clearly showed all involved the use of a digital checklist system increases performance and reduces inconsistent operations.

RIGOR® is having a substantial impact on operations worldwide. Digital workflow and data capture tools like RIGOR® allow companies to turn data opportunities into actionable operational solutions. In a volatile, uncertain and complex market, Check-6 and RIGOR® ensure lasting results and help position an organization ahead of the competition.



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