## CONSTANT-G CONTROL™ (CGC) Increases KING COBRA™ Shaker Performance

## **Challenges**

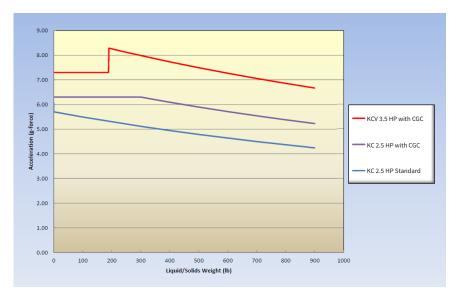
- Achieve 100% flow over each shaker
- Determine value added by CGC to shaker's performance
- Determine future replacement shakers for existing rigs

## **Well Information**

- · Location: Oklahoma, US
- Contractor: Major DrillingContractor
- Shakers: KING COBRA 2.5 hp;
  KING COBRA 2.5 hp with CGC;
  KING COBRA 3.5 hp with CGC

## **Solution & Results**

- CGC allowed KING COBRA shakers to process more drilling fluid with the same size screens than KING COBRA shakers not equipped with CGC. The ability to process more drilling fluid enables an Operator to screen finer and maintain better control over drill cuttings, which can lead to increased ROP and reduced drilling fluid costs.
- Major Drilling Contractor chose the KING COBRA 3.5 hp Shaker with CGC as their shaker of choice for all newly built rigs and replacement shakers for existing rigs.



CONSTANT-G CONTROL Advantage G-Force vs. Weight

In an effort to gauge the disparity in performance between different models and determine the right choice for the customer's new rigs, FluidControl found that the KING COBRA shakers utilizing CONSTANT-G CONTROL (CGC) processed 100% of the flow and aided in increased production while reducing costs.

FluidControl conducted a side-by-side flow capacity field test of the KING COBRA 2.5 hp, the KING COBRA 2.5 hp with CGC and the KING COBRA 3.5 hp with CGC. Each shaker attempted to process 100% of drilling fluid returns at a rate of 980 gpm using RHD 180 mesh (API 100) screens while drilling a 17 ½-inch diameter hole with a rate of penetration (ROP) of 100 ft/hour with a water-base mud (WBM).

CGC gives the shakers the ability to automatically increase G-force under loaded conditions, something the competitor's products can't do.

The increase in G-force improves the shale shaker's ability to process drill cuttings, which can lead to increased ROP and reduced drilling fluid costs.

FluidControl processed 85% (830 gpm) of the 980 gpm flow on the KING COBRA 2.5 hp operating without the CGC. Both KING COBRA shakers installed with CGC processed 100% of the flow at 980 gpm. The KING COBRA 3.5 hp with CGC used 33% less screen area than the KING COBRA 2.5 hp with CGC. This increase in unused screen area, would allow FluidControl to dress the shaker with screens 2-3 API sizes finer than the shakers without CGC at the same flow rate.

The client chose the KING COBRA 3.5 hp for use on all new rigs and as a replacement for shakers on existing rigs.

To learn more about CONSTANT-G CONTROL, contact a FluidControl representative.

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