BLACK MAMBA ROD LIFT

REPORT 22.1

UNCONTROLLABLE GAS INTERFERENCE CAUSES PROBLEMATIC REPEAT ROD FAILURES FOR OPERATOR

PRIOR TO P&A, OPERATOR GIVES BLACK MAMBA A TRY

A Bakken operator had their hands tied with this particular well. Habitual intervention costs had management planning P&A if a solution for rod-pumping was not found. Compression related rod failures from gas interference and fluid pound netted MTF of less than 3 months. After finding Black Mamba through LinkedIn, there was a no-downside installation of Black Mamba's 7-guides per rod configuration. The threshold for success: 4 months.

CHALLENGE

At 12,075' and limited surface pumping unit capability, limited options were available for rod string design. The customer at the time did not have confidence in fiberglass sucker rod due to prior attempts without success. Unpredictable gas interference led to gas and fluid pounding, beating up the lower taper and causing frequent rod parts. Traditional guides were used without success as additional bending moments were created and failure frequency actually ***increased***.

SOLUTION

A lightweight high strength rod string was fully guided 7-guides per rod - the ultimate insurance for the rod string investment. The rod design featured a 767 design. At this time, Black Mamba only offered guiding for 3/4" and 7/8" sucker rods for 2-7/8" tubing.

RESULTS

At 6-months in, initial feedback was emailed over.

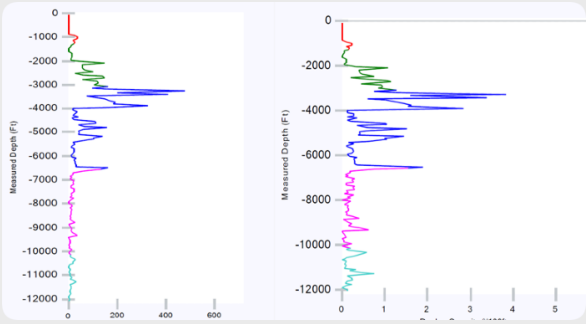
"Hey Jon! Things are going well. Here's the latest data on the well. Pretty steady, on curve, and so far the longest run times we've seen in a long time from the well."

11 months in, additional feedback from the customer was received:

"[Black Mamba]... I have to gripe a bit. I want to change the BHA on this well because of our gas issues... but your damn rods WILL NOT BREAK, so I can't justify it just yet. You guys have absolutely proven yourselves to our organization."

5 more wells were then given to Black Mamba, also providing us design control.

PROJECT DESCRIPTION

LOCATION:
Bakken, ND

CUSTOMER TYPE:	Independent
PRODUCTION:	130 bfpd
INSTALL DATE:	January 2021
CURRENT DATE:	January 2022
RUN TIME:	12 months