

Problem

The Non-Drive End (NDE) of a propane compressor within a prominent Oil and Gas company in Qatar exhibited elevated temperatures, contrary to an MPC (Membrane Patch Colorimetry) test result of 7.5. The bearing temperatures recorded in the range of 76-84°C surpassed the stipulated warning limit of 70°C, requiring a thorough investigation. Subsequent physical examination of the bearing housings revealed substantial rubbing and deposits on the inner walls.

Solution

With the help of Petrotec, Fluitec's **Boost VRTM** was added to the system and the **ESP VITATM** also attached in a kidney loop to help remove the deposits from the system.

Results

Within one week of initiating the integrated treatment protocol, MPC values diminished, leading to stabilized

Total Saved

\$71K

Client: Major Oil & Gas

Company

Country: Qatar

Application: Siemens MP Propane

Compressor

Cost savings: \$71,000 over 5 years

Oil savings: 3,300 liters

CO2e kg saved: 21,144 CO2e kg over

5 years

Solution: ESP VITA III & Boost VR

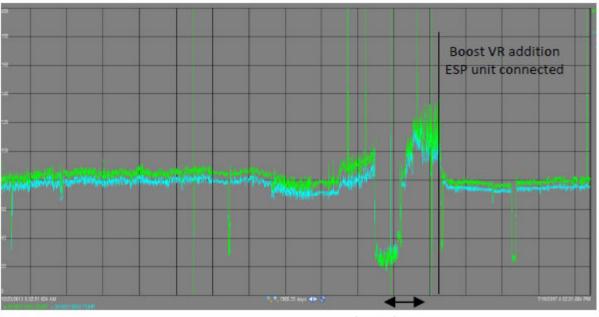




case study

temperatures. Approximately five months later, the ESP VITA III unit was disengaged from the system, resulting in sustained bearing temperatures below the 70°C threshold. Subsequent physical examination of the bearing housings revealed a pristine condition, devoid of deposits.

Temperatures of the units before and after the Boost VR & ESP VITA III unit was used



Physical inspection

Bearing Housing





