

abstract of Artificial Lift Reliability 2005

TITLE -

"Improving Reliability and Reducing Risk by the use of Failure Mode Analysis in the Qualification Process"

ABSTRACT -

"Industry has recently recognised the value of failure mode analysis, which is now being used on a rapidly expanding scale, identifying in detail what can go wrong and what actions are required to prevent those failures or mitigate the consequences. This presentation demonstrates current best practice, including a number of new developments, illustrated by examples from recent qualification programmes for downhole equipment. The lessons are directly relevant to ESPs, monitoring and metering systems. gas lift valves and safety valves.

We will address key issues for effective outcomes, as result of recent project experience, namely -

- o complete-system approach
- o functional requirements
- o life-cycle phases
- o cost of failure
- o traceability
- o directly usable results

These issues are important wherever the risk of applying new technology is high, which is true of most oil and gas E&P projects. The risks are higher still when projects have significant downhole complexity, because the downhole elements are subject to the worst operating conditions and the highest consequences of failure."

John Hother
Proneta Ltd
Sussex Innovation Centre
Science Park Square
Brighton BN1 9SB
United Kingdom

office tel: +44 1273 234 640
mobile tel: +44 796 872 6779
email: John.Hother@proneta.co.uk

www.proneta.co.uk