2025 GAS LIFT WORKSHOP

Edge Against The Ice

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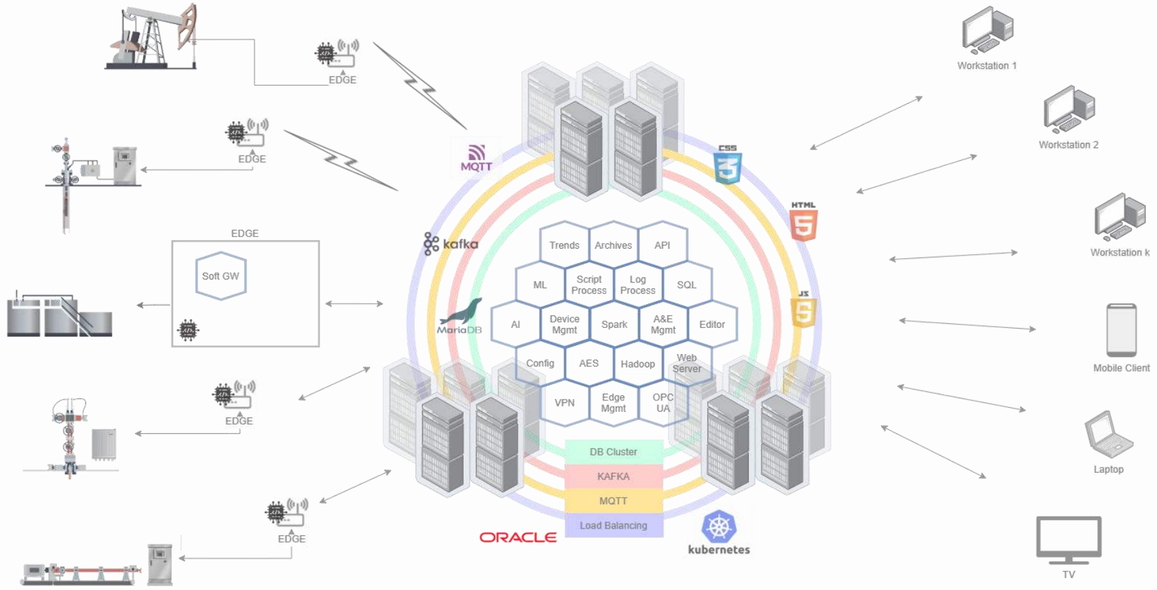
Introduction

- **What is an EDGE device**
- **Challenges of Frozen GL flowlines causing production downtime**
- **Implementation of FlowDiversion**
- **Results**
- **The future of artificial lift on the edge**

What is EDGE?

- It is more than just a piece of a controller or hardware connected to an asset; it serves as an intelligent gateway, with a PC integrated into the core software. This system is capable of running applications autonomously, regardless of internet or cloud connectivity. Furthermore, it must be digitally configurable at scale.



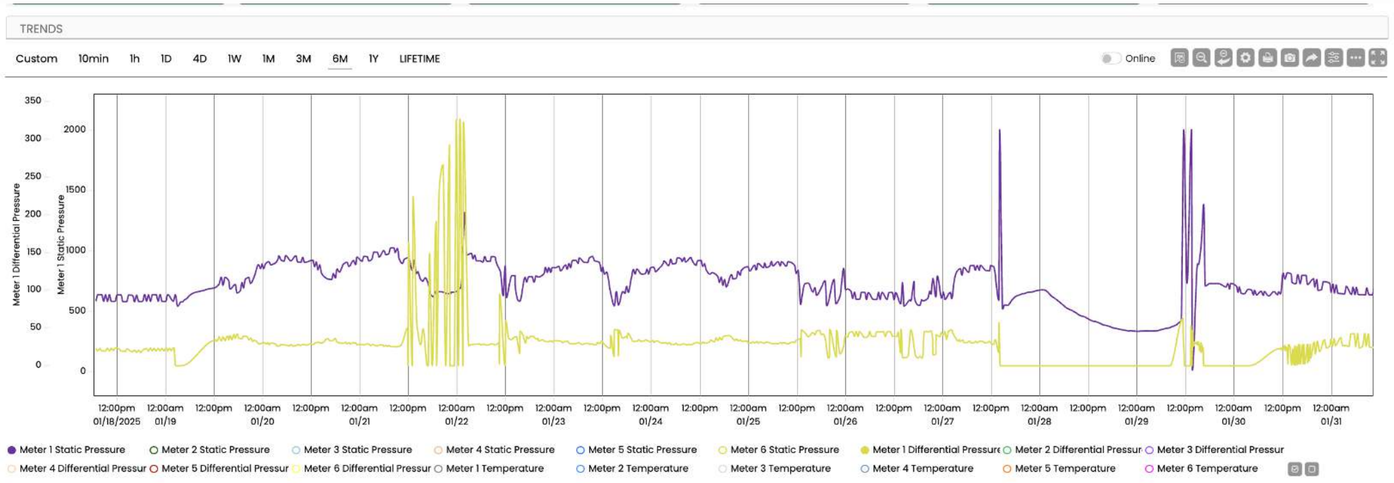
Challenges of Frozen Gas Lift flowlines causing production downtime

Pad Details:

- Midland Basin
- Implementation date February 2025
- Three continuous gas lift wells
- Central compression – capacity 1250mcf
- Production: 200 bopd

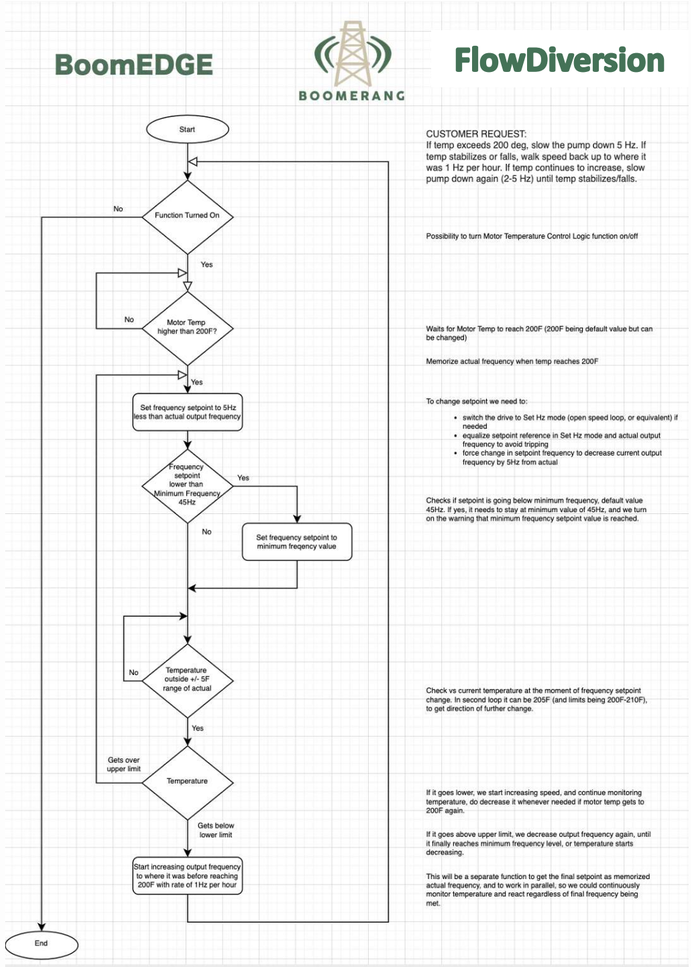
Challenges:

- Low temperatures
- Lack of recycle
- Chemical inefficiencies
- Freezing pipes causing compressor high discharge faults
- Full pad downtime

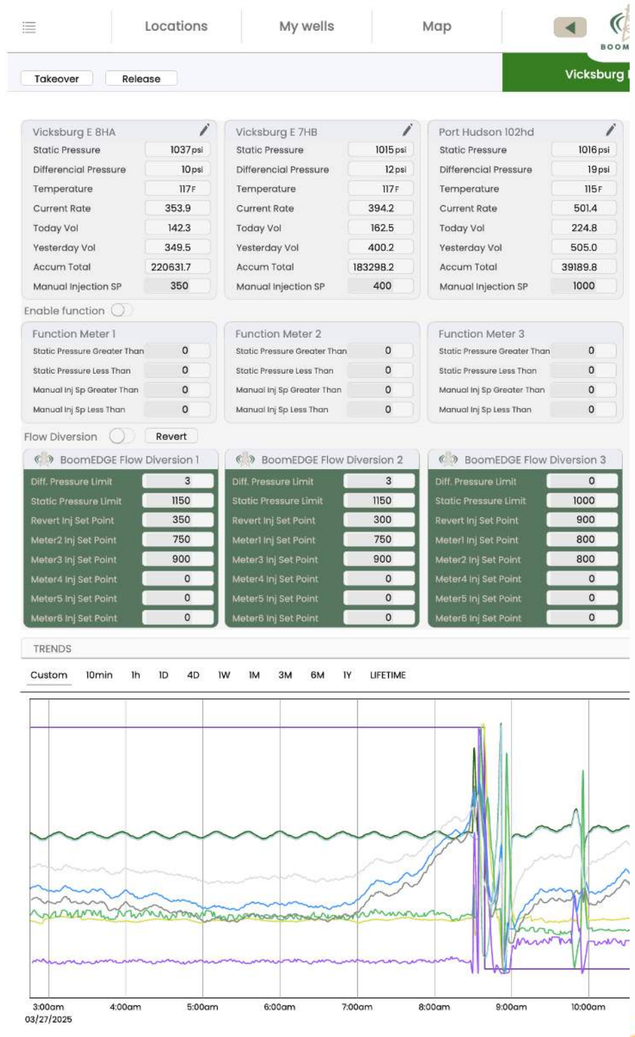


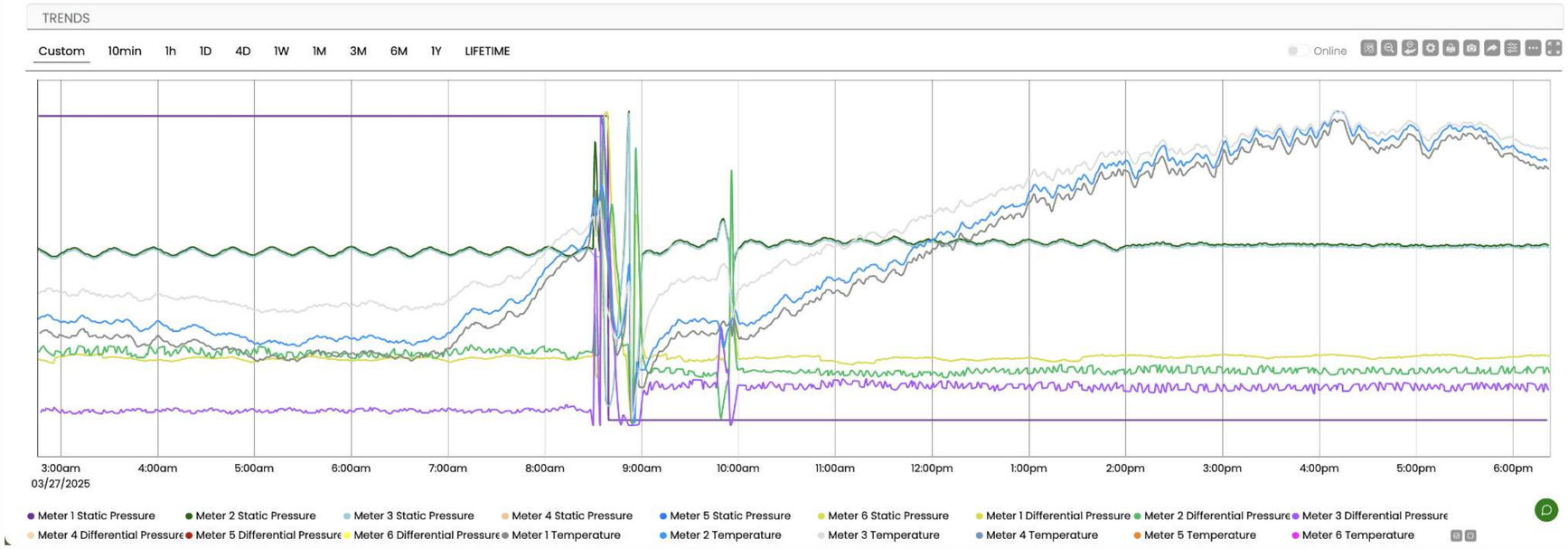
FlowDiversion

To mitigate this risk, we have integrated edge technology in the form of the BoomEDGE flow diversion algorithm. The edge device continuously monitors the system and is capable of detecting negative patterns, such as an abnormally low differential pressure, which may signal an impending freeze. When such a pattern is identified, the system autonomously reroutes injection pressure from the problem well to the remaining functional wells, ensuring that production is sustained while the frozen pipeline is being addressed. This diversion provides a critical solution to mitigate production losses on two wells while the affected pipeline is repaired.



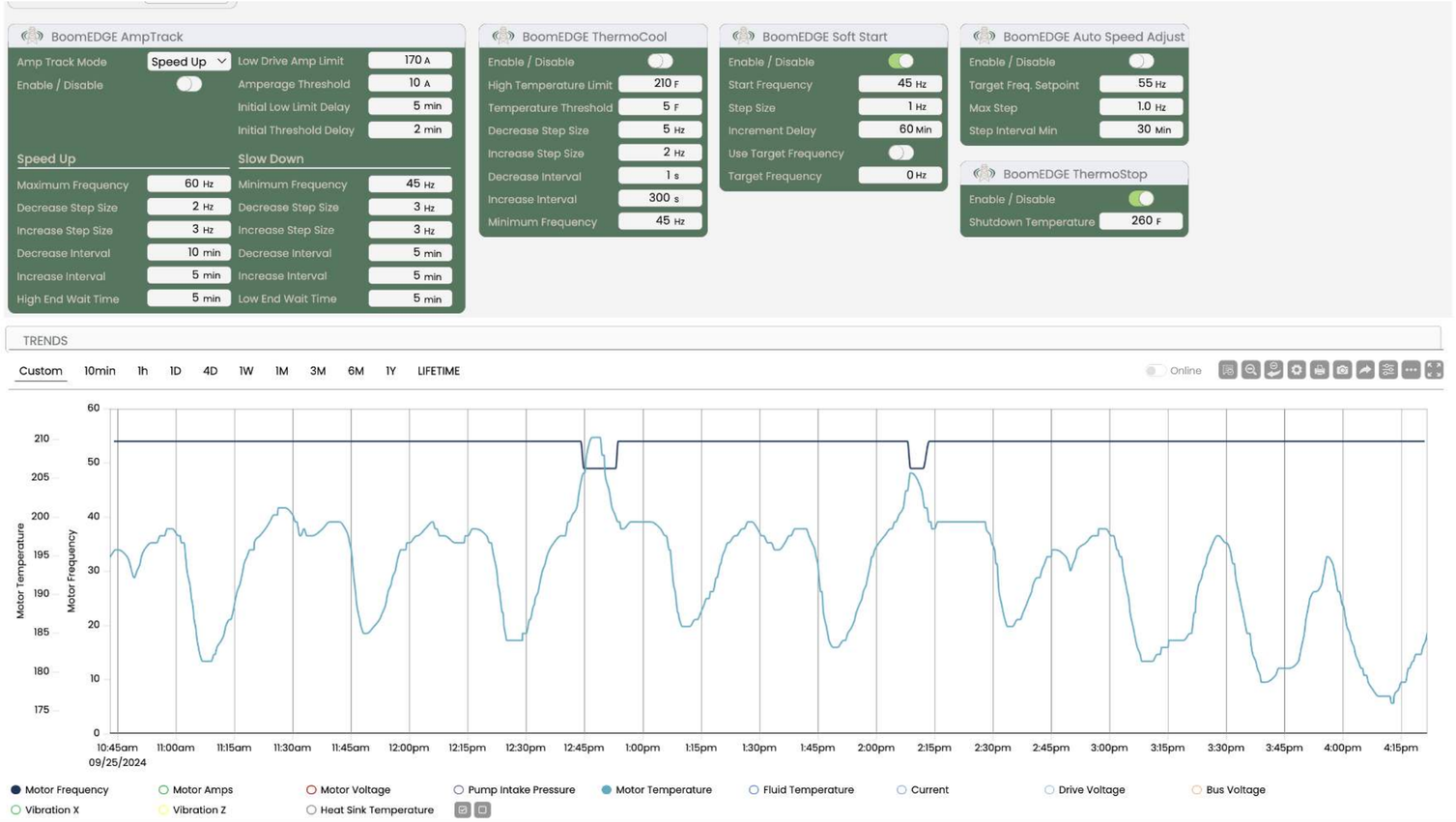
Results (hourly)





The Future of Artificial Lift on the Edge

Multiple Edge Algorithms, working in conjunction with each other, focusing on high value targets to eliminate shutdowns and assist in longevity of any downhole or surface system.



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Question Time

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