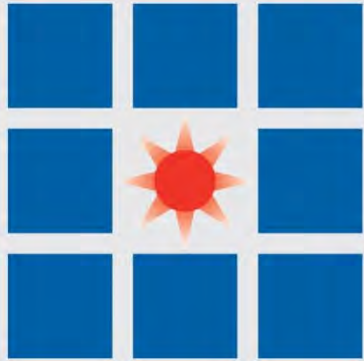
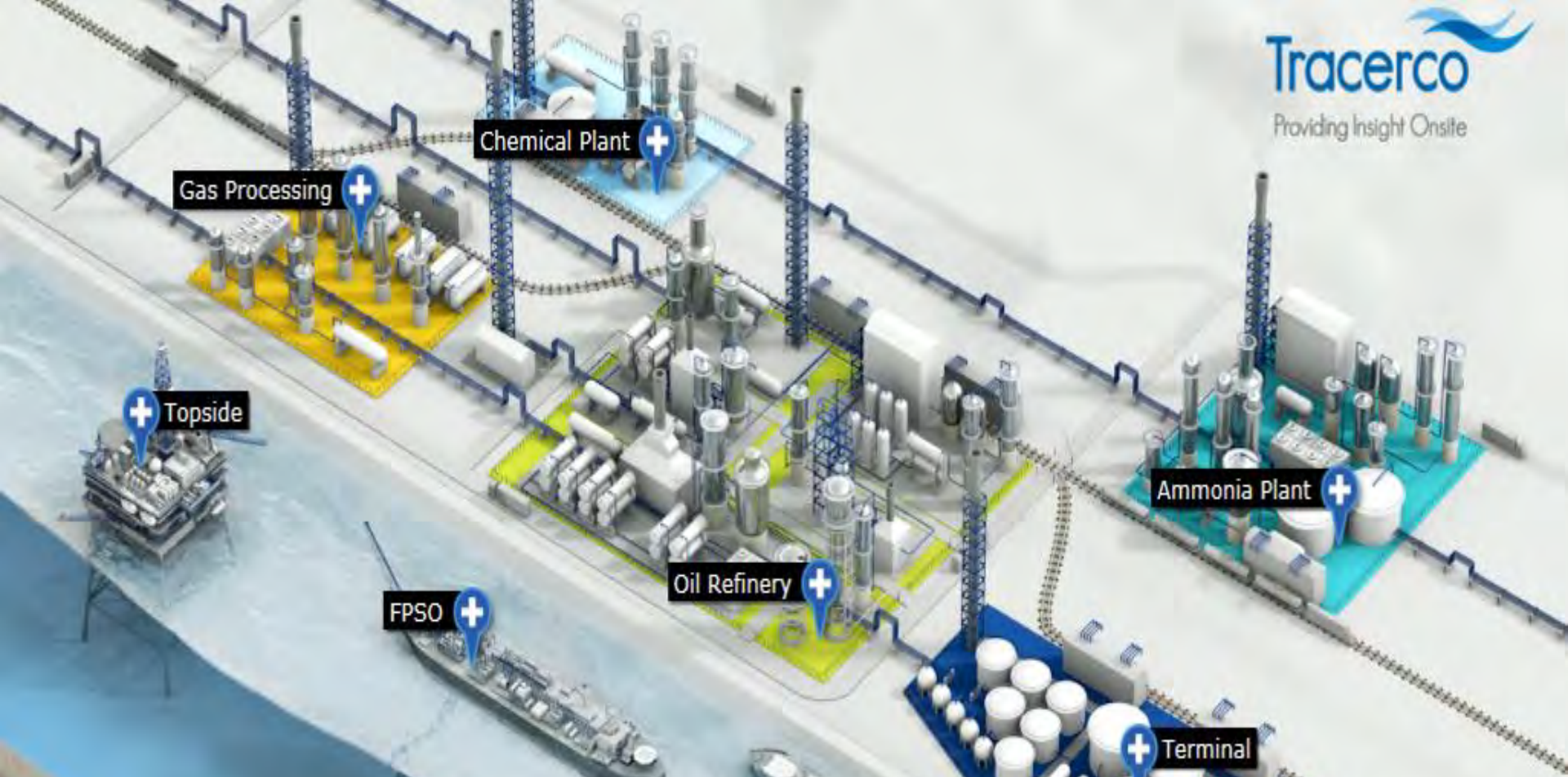




Intelligent Plant Troubleshooting using Tracerco Flare

Andrew Shaw – Business Development Manager
Andrew.Shaw@Tracerco.com



What we do...

Provide technologies that enable visualisation of plant processes to characterise operations and deliver optimisation to the end user

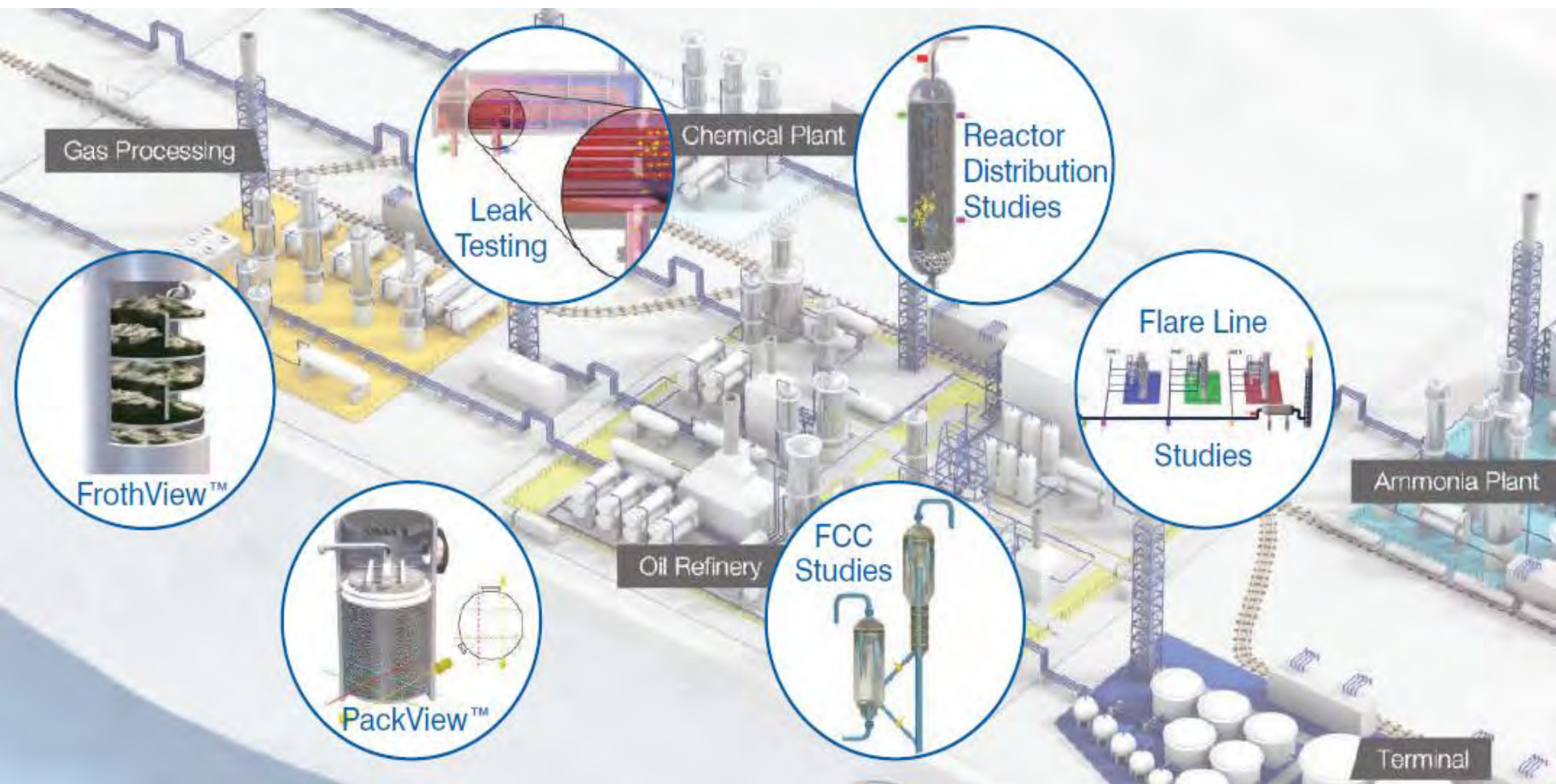
JM



Tracerco's Classical Solution Portfolio

Tracerco

Providing Insight Onsite



Our USP:
Data Capture and Data Analysis
Deliver Valuable Insight to our Clients.



Plant monitoring and optimisation



Proactive, Predictive and Intelligent



Maximise asset utilisation

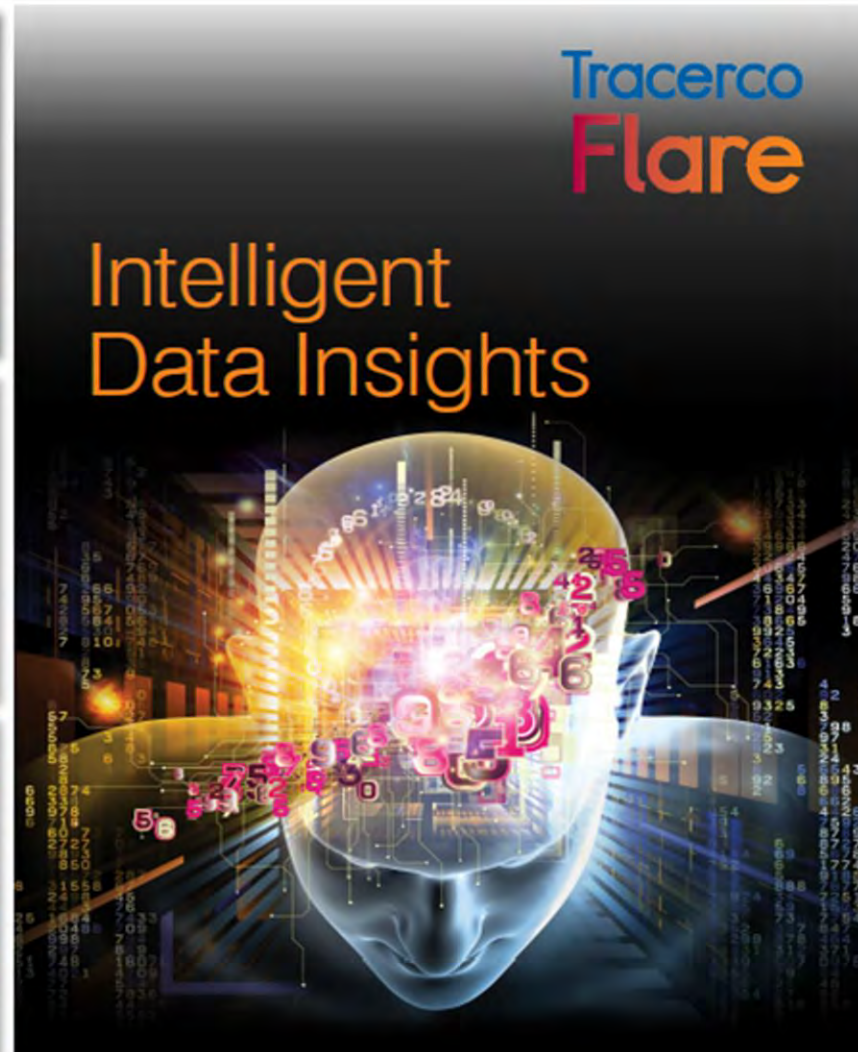
enhance quality

reduce costs

reduce waste

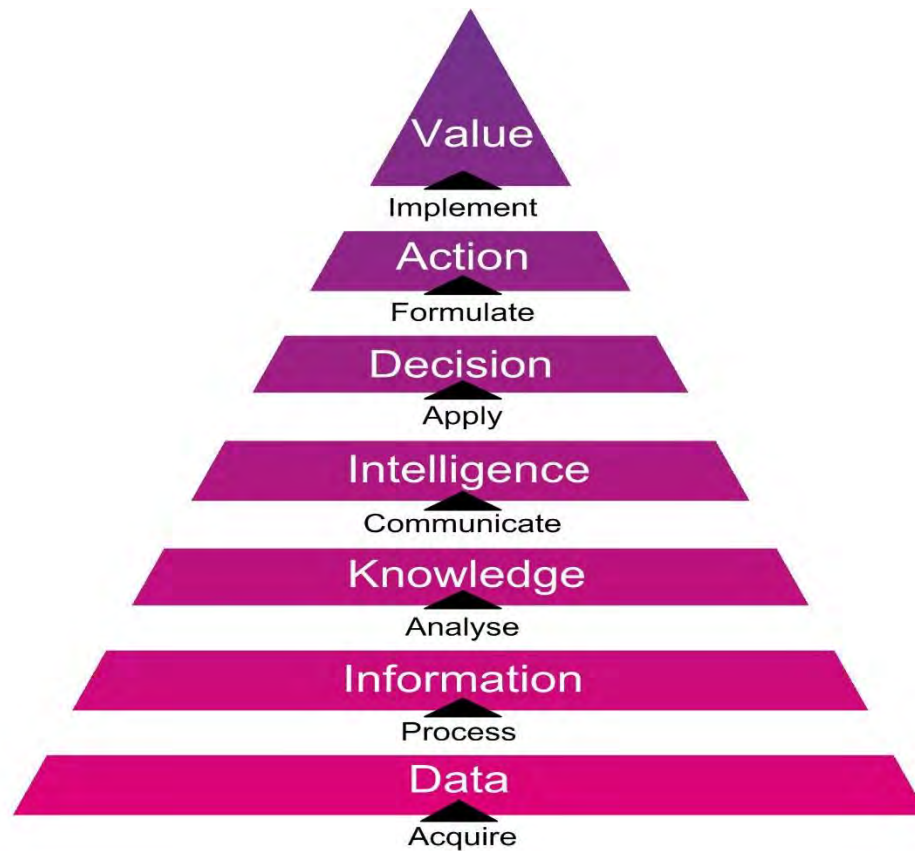
increase yield

Data Analytics



How Does It Work?

Data = Value



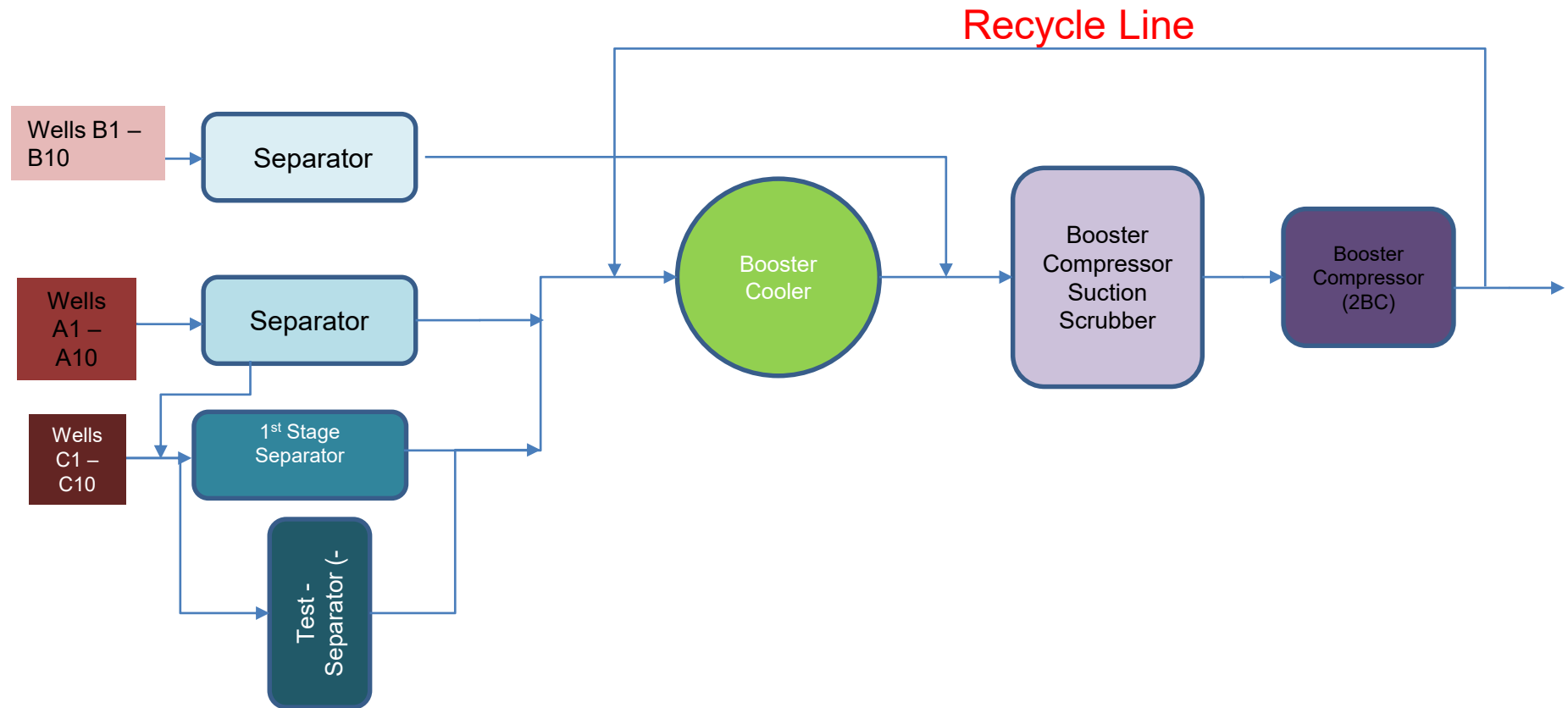
How it works.

- **Maximise asset utilisation**
- **enhance quality**
- **reduce costs**
- **reduce waste**
- **increase yield**

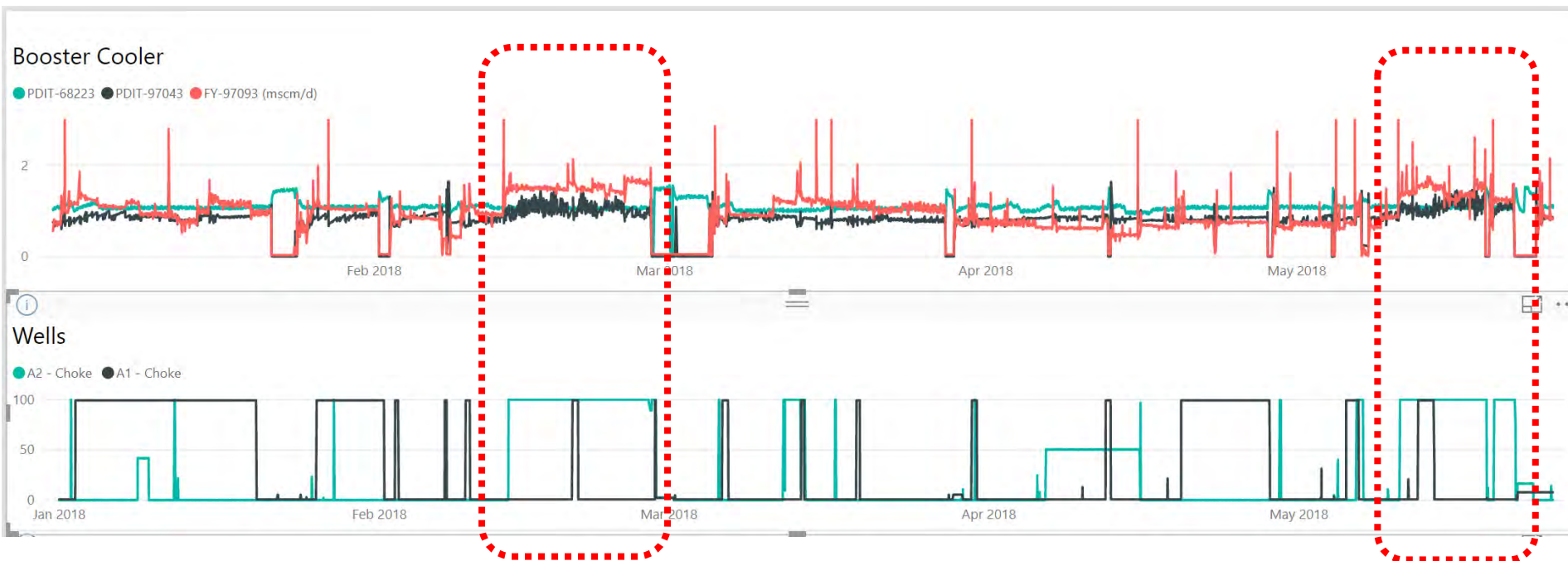


Assessment of the cause of fouling (UK operator)

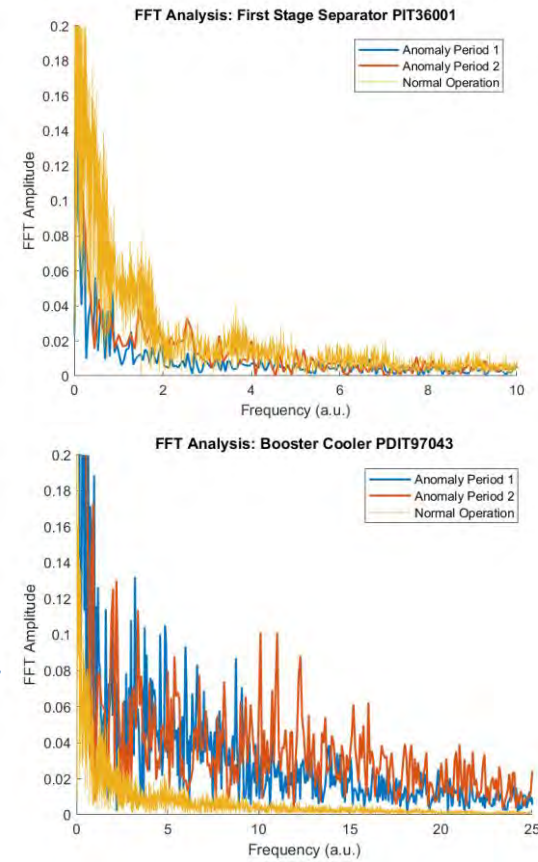
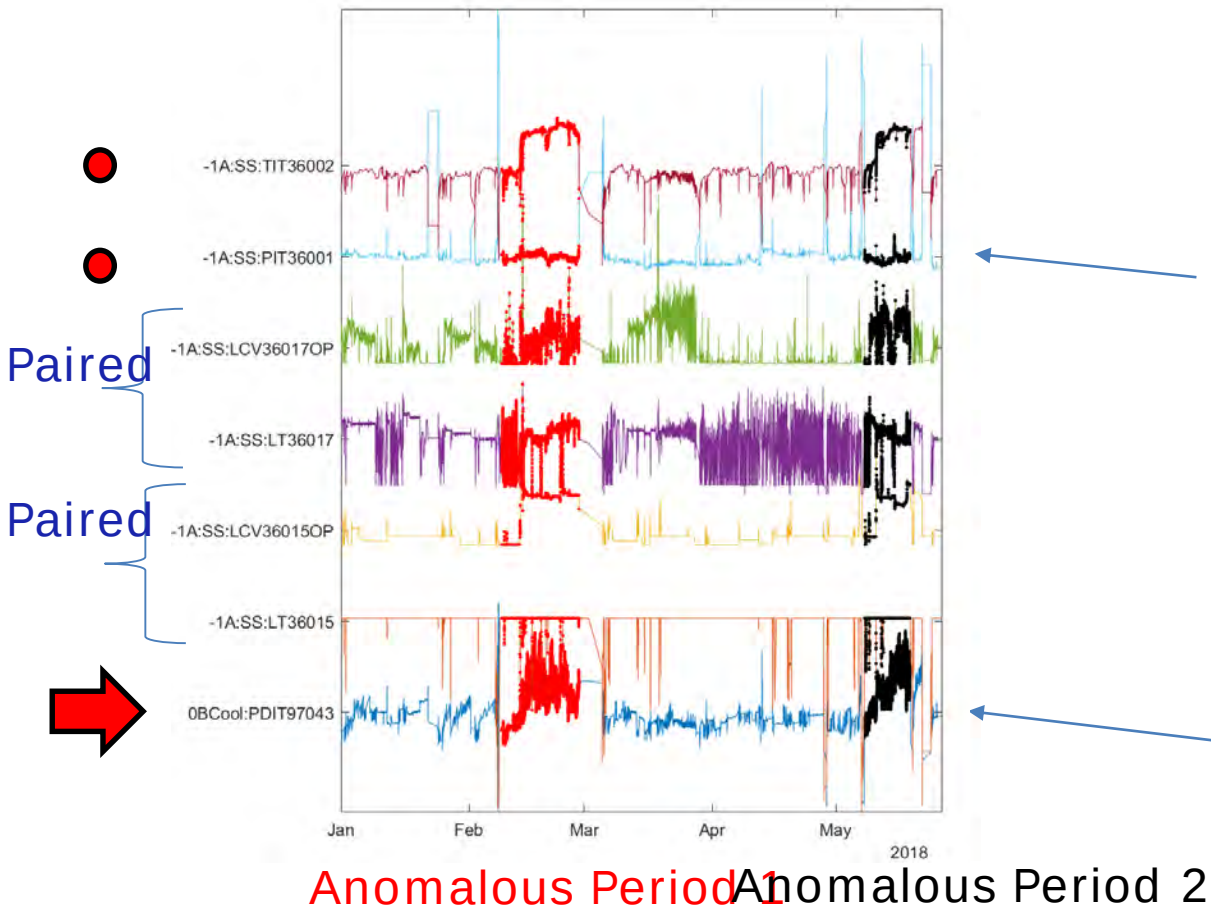
High Level Outline



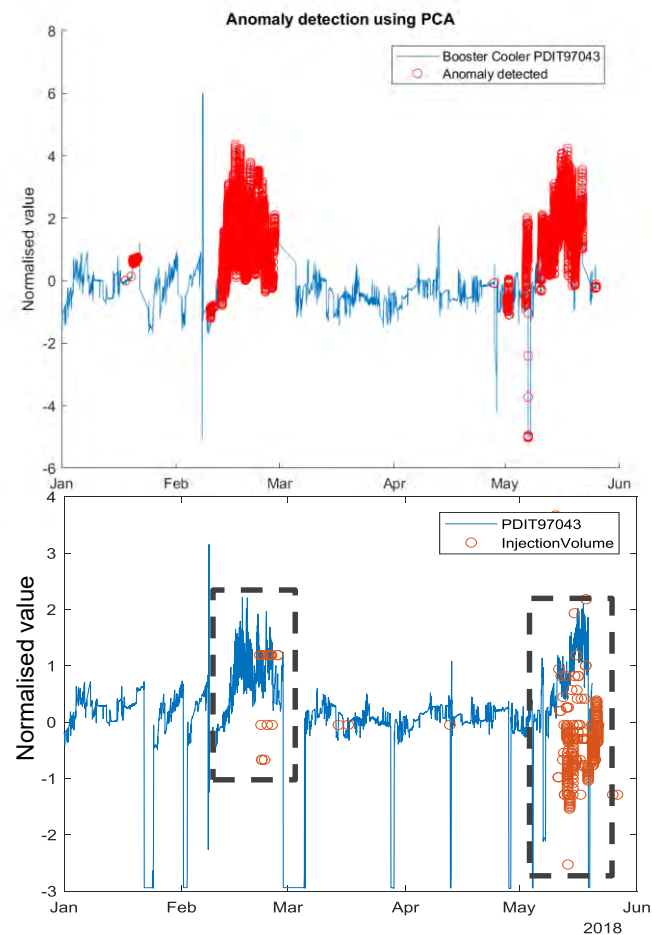
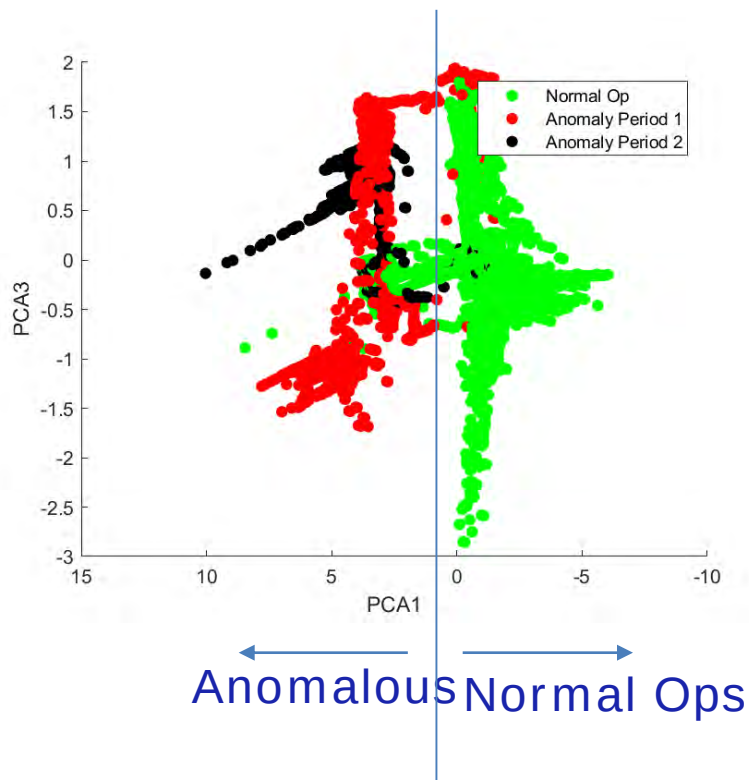
Origin: A2 Well 'On' Event Coincides with Fouling



Cause of Problem: A2 Well Goes to First Stage Separator



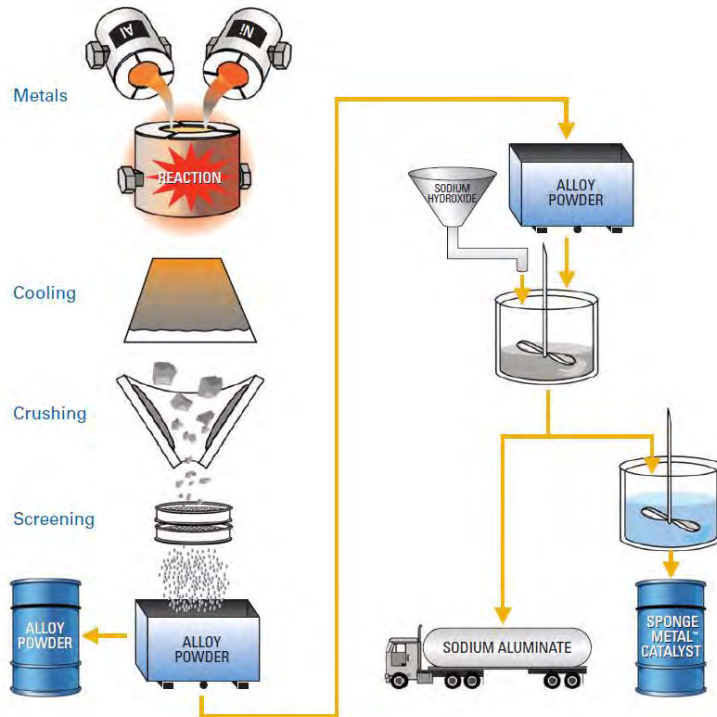
Predicting Fouling using PCA Based Analysis



Sponge Metal Catalyst Production Plant Efficiency Study

Sponge Metal Catalyst Production Plant

Production Process



Reactor



Case Study

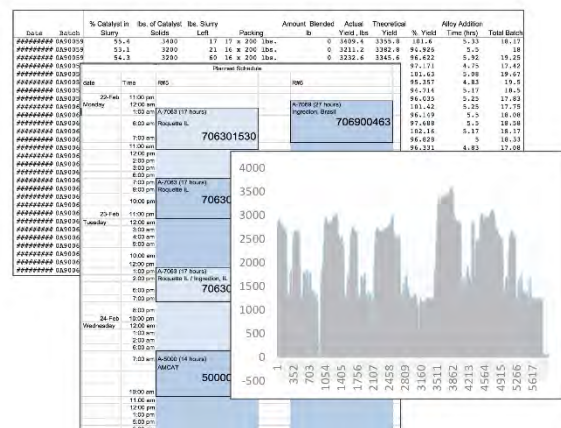
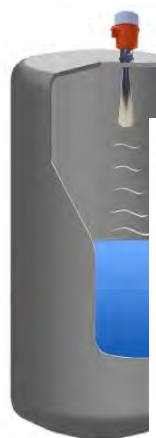
Goal: Estimate reactor productivity from level sensor

Data: Level sensor, Production Logs, QA Data

Problem

Tools

Insight



Raw Data

Step 1
charge

Step 2
slurry

Step 3
boil

Step 4
wash cycling

Step 5
packing

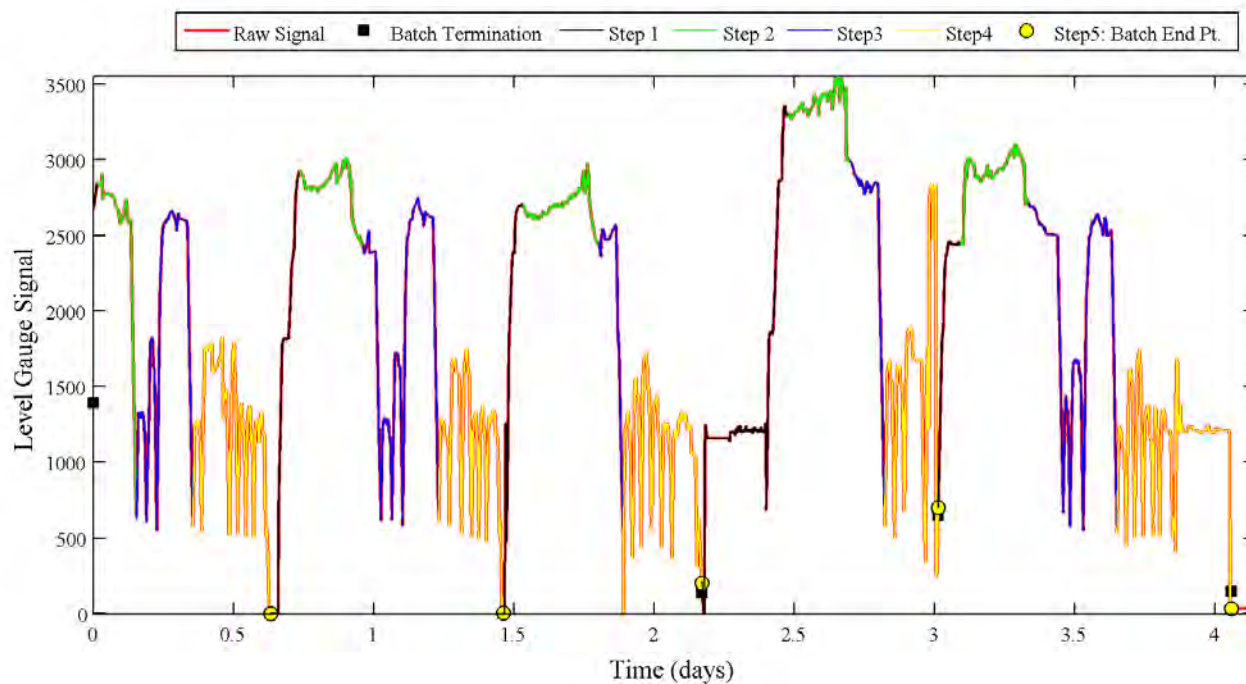
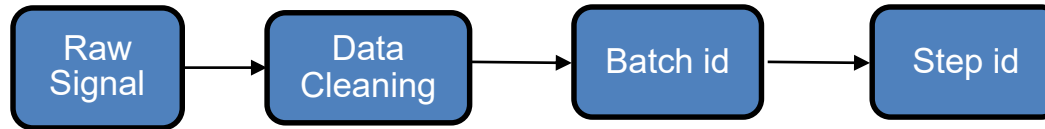
Data Miner



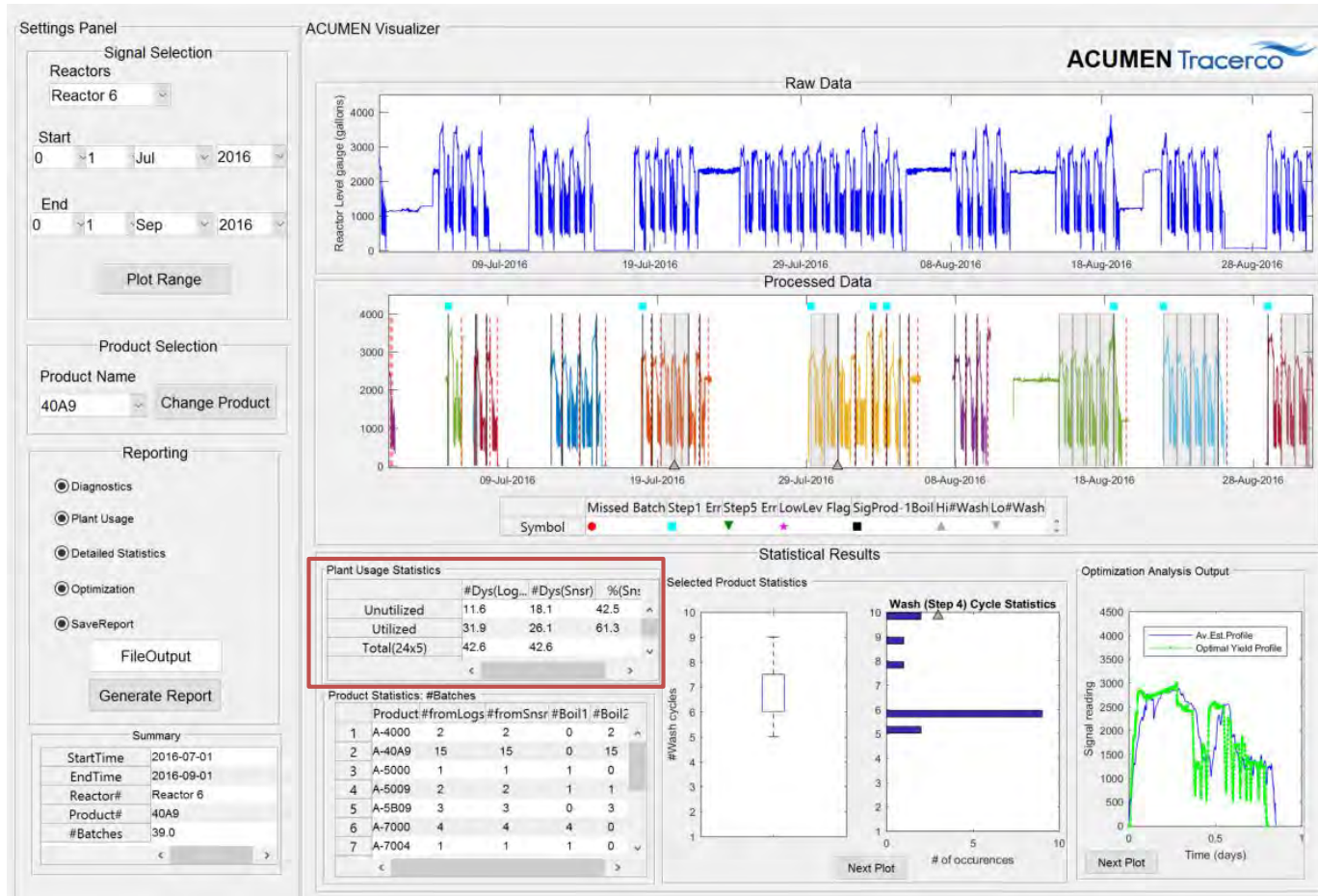
**Visualization
Solutions**

Johnson Matthey
Inspiring science, enhancing life

Data Mining Algorithm



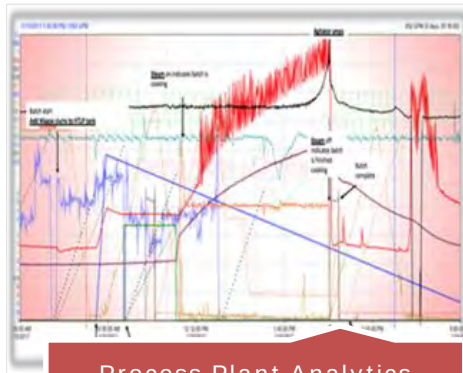
Production Floor: Operations Dashboard



Productivity Opportunity Identified: 20% Under-utilization

Tracerco Flare:

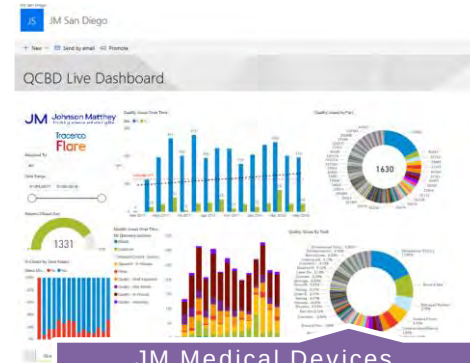
Sample Set of Projects



Process Plant Analytics
Fault Identification, Minimizing
Losses, Cost Saving Opportunity



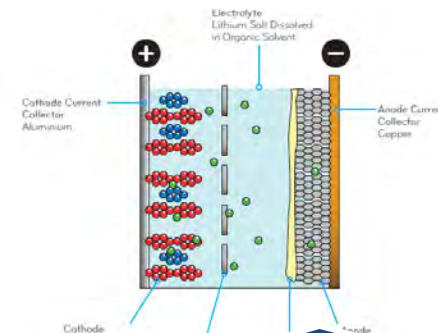
Battery Predictive Analytics
Predict Battery Lifetime



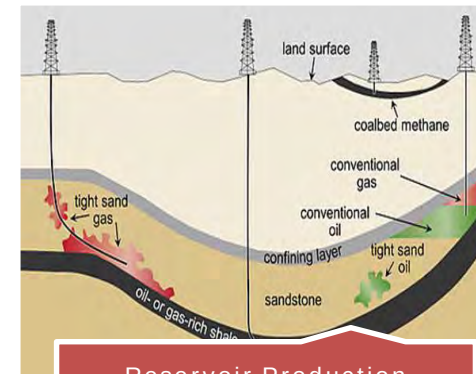
JM Medical Devices
Real-time Quality Control, Floor
Productivity, Yield Reporting
Parts failure Risk Analysis



Refinery Analytics:
Distillation Columns
Flooded trays/column & Yield
Estimation (with FRI)



Battery Materials Design
Optimization
Experimental Testing Analytics



Reservoir Production
Optimise Frack Completion for
Maximum Oil Productivity

Challenge us!

