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Data Driven Operations in Energy Production

DEVON ENERGY

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AVEVA

Devon Energy is a leading independent oil and gas producer

- Operations across the United States
- Diversified mix of oil & natural gas production
- Large scale operations improve our profitability
- Deep inventory and track record of smart acquisitions to grow



Our Story: Field operations



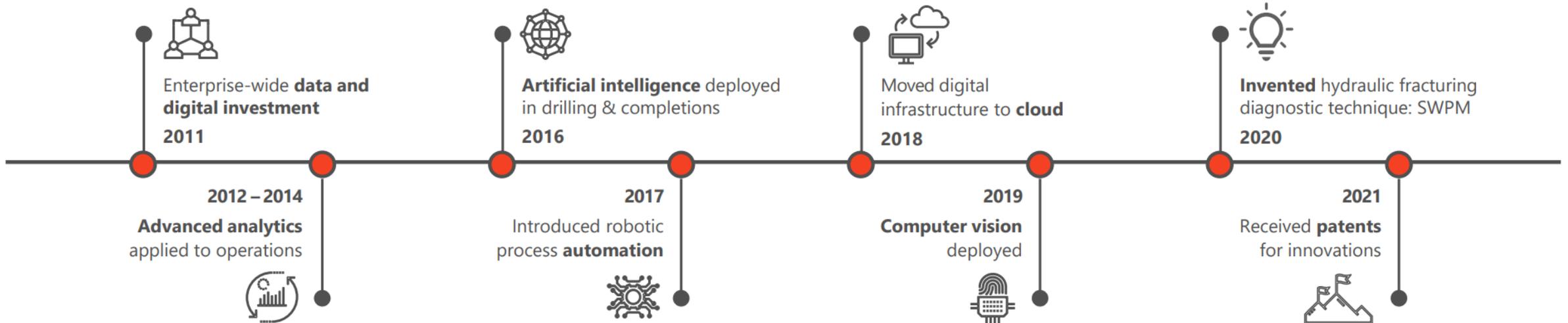
- Thousands of sites across the US, with over 10,000 tanks
- 100's of operators visit sites to perform maintenance and optimize our production



Innovation and Technology

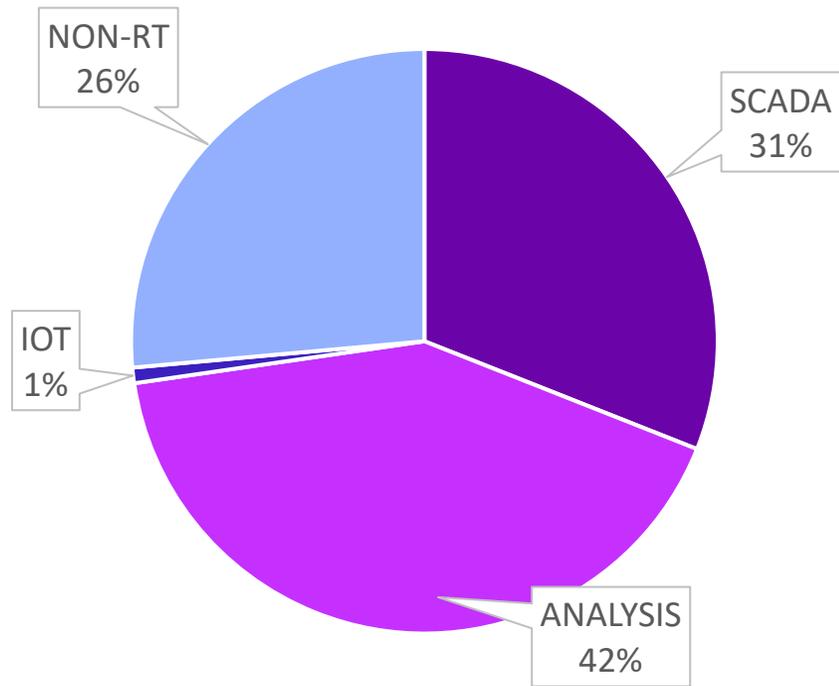


OUR TECHNOLOGY EVOLUTION

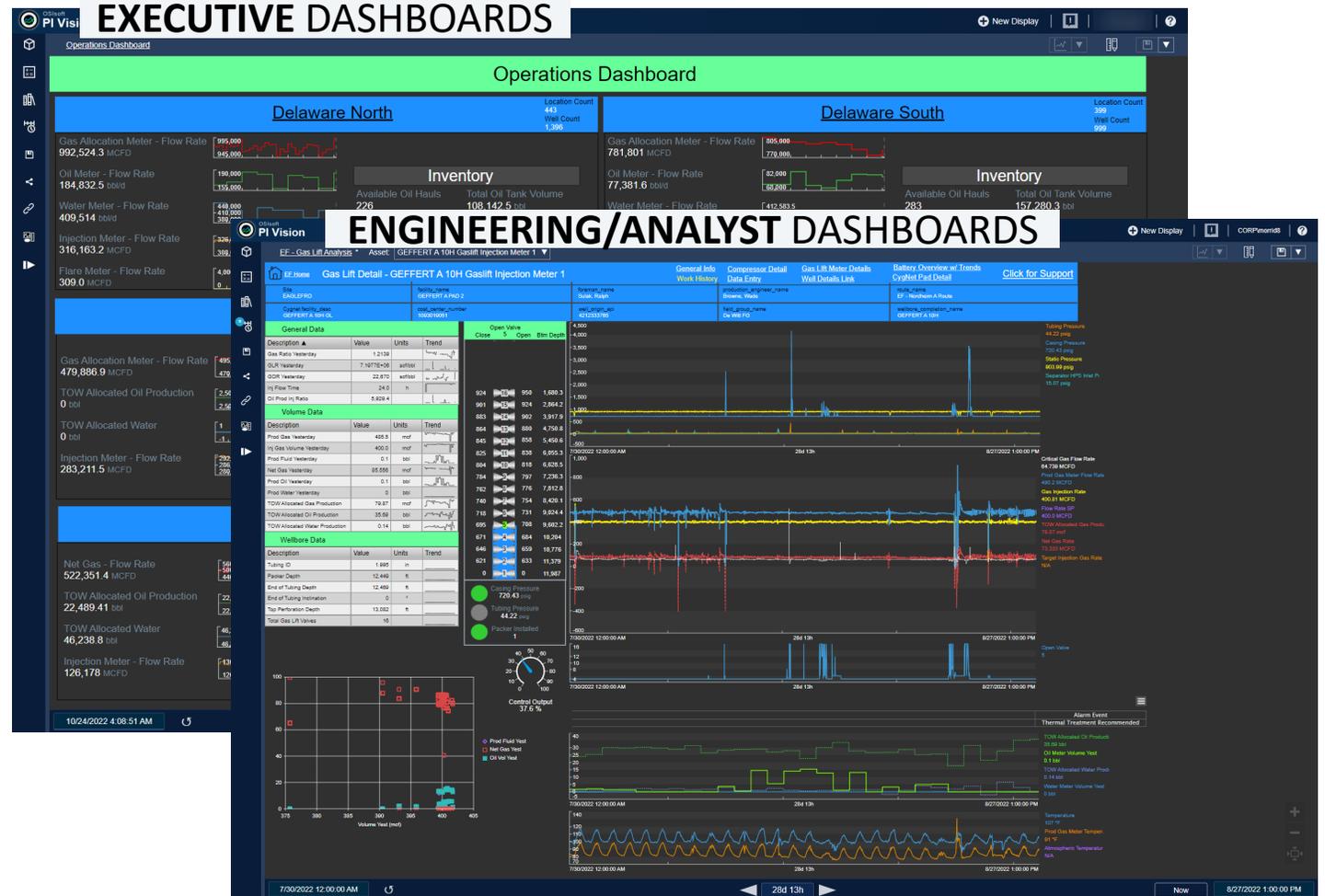


Data Driven Operations

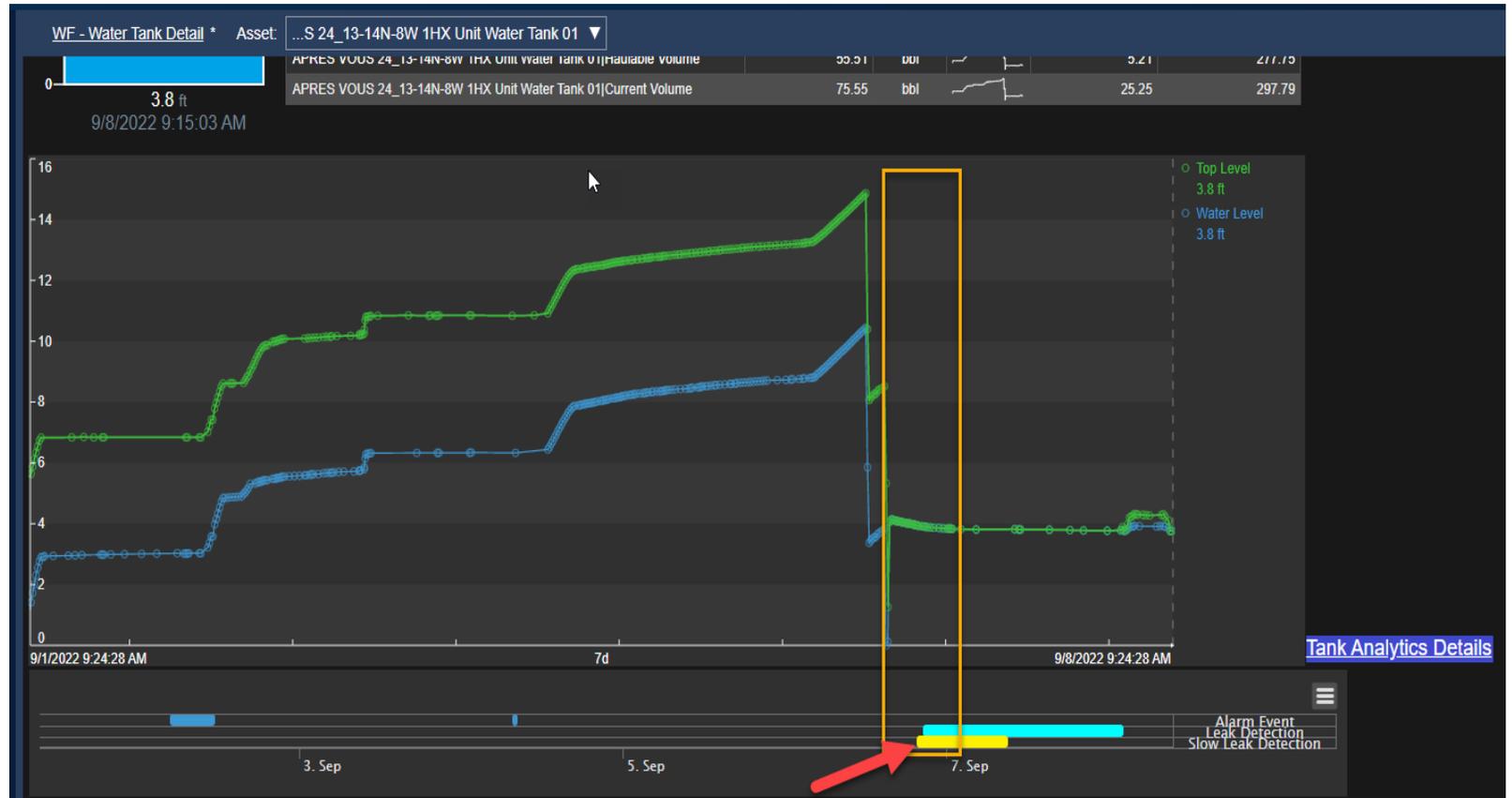
TAG COUNT BY CATEGORY



11.2MM Data Points



Using data to react quickly and prevent spills



Strengthening Our Environmental Performance



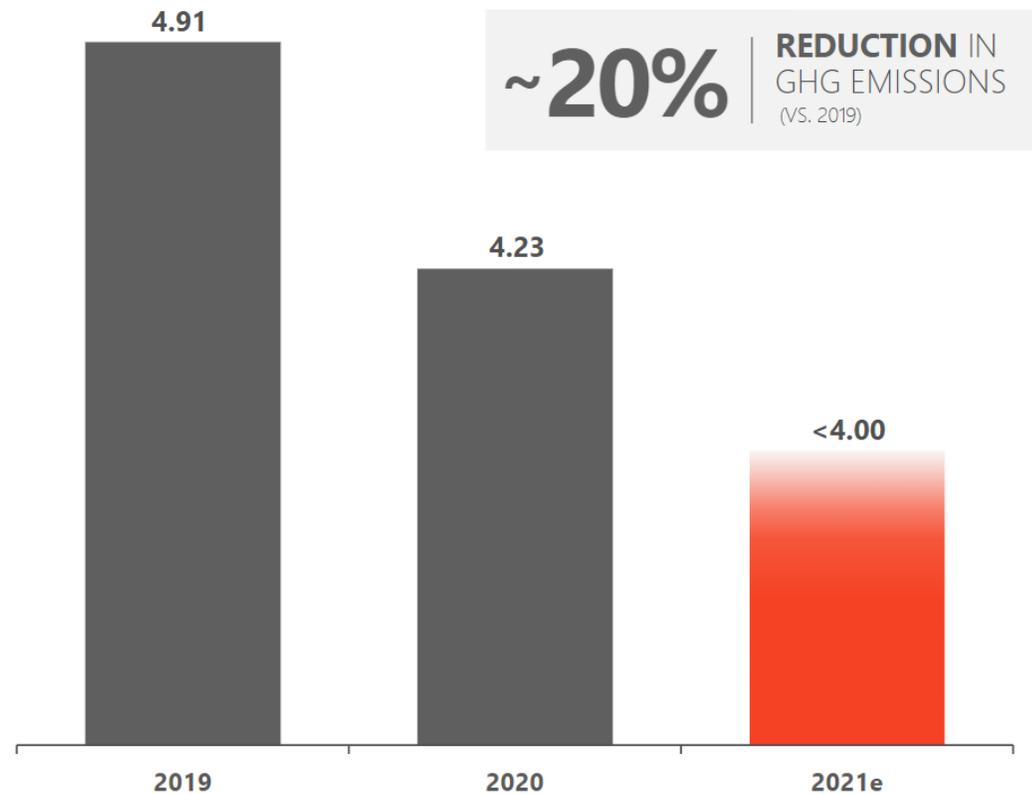
Committed to aggressive emissions targets

- Joined Oil & Gas Methane Partnership (OGMP 2.0)
- Plan to reduce methane emissions by 65% by 2030

Taking immediate action & delivering results

- Scope 1 & 2 GHG emissions reduced by ~20%
- Methane emissions were reduced 47% in 2020
- Flared volume intensity declined by 33% in 2020

Reducing Scope 1 & 2 GHG emissions
(Million tonnes CO₂e)

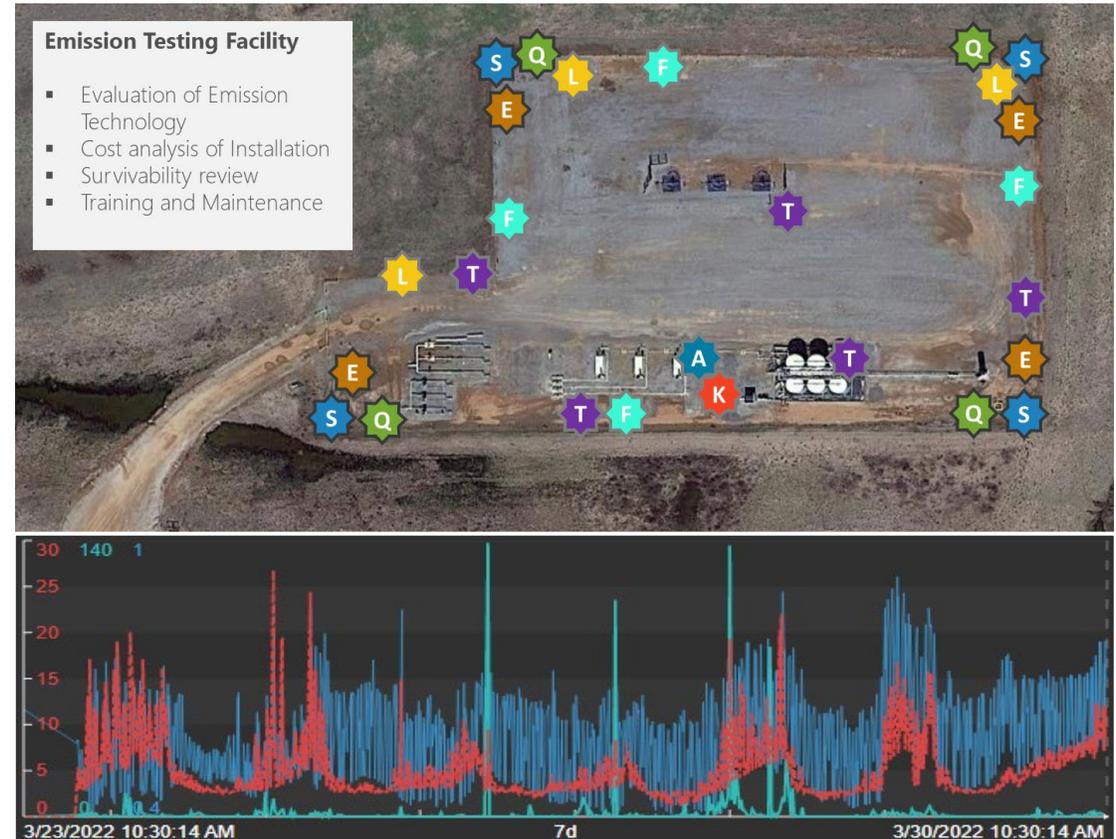


Emissions / Methane Detection

Using methane detection technology to measure and continually improve

What We've Learned

- New level of insight into our emissions performance
- Driving new operational efficiencies
- Emissions data in PI Vision raises awareness



Alternative Energy Reduces Fuel Consumption



Solar Farm in Southeast New Mexico

- Working with local electrical Coop
- Generates 5MW of power into the grid
- Enhances stability of electric grid infrastructure
- Renewables can help drive responsible growth

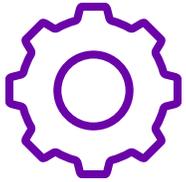


Image Analytics – Cameras as Sensors

- Capture data in hazardous areas
- Validate data or augment existing sensors
- Accomplish detailed facility surveillance while reducing miles driven



Modern US Land oil and gas operations



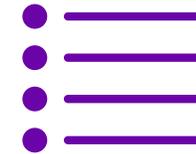
Challenge

- 1000's of remote sites across the US relied on manual observation and inefficient diagnosis of problems.



Solution

- Modernize field operations to the application of digital technology including PI AF and PI Vision.
- Set a technology foundation to apply advanced analytics and computer vision applications.



Benefits

- Improved downtime, reduced miles driven and reduced costs.
- Exception-based surveillance, significantly accelerated 'Time to Value' for Advanced Analytics & Machine Learning projects

Questions?

Please wait for the microphone.
State your name and company.



Please remember to...

Navigate to this session in the mobile app to complete the survey.



Thank you!