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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

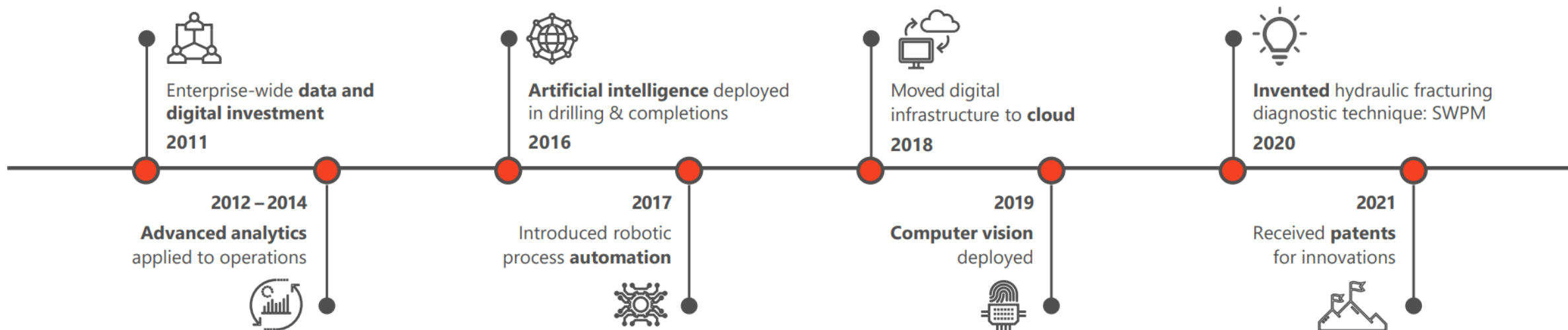
- Thousands of sites across the US, with over 10,000 tanks
- 100's of operators visit sites to perform maintenance and optimize our production



# Innovation and Technology



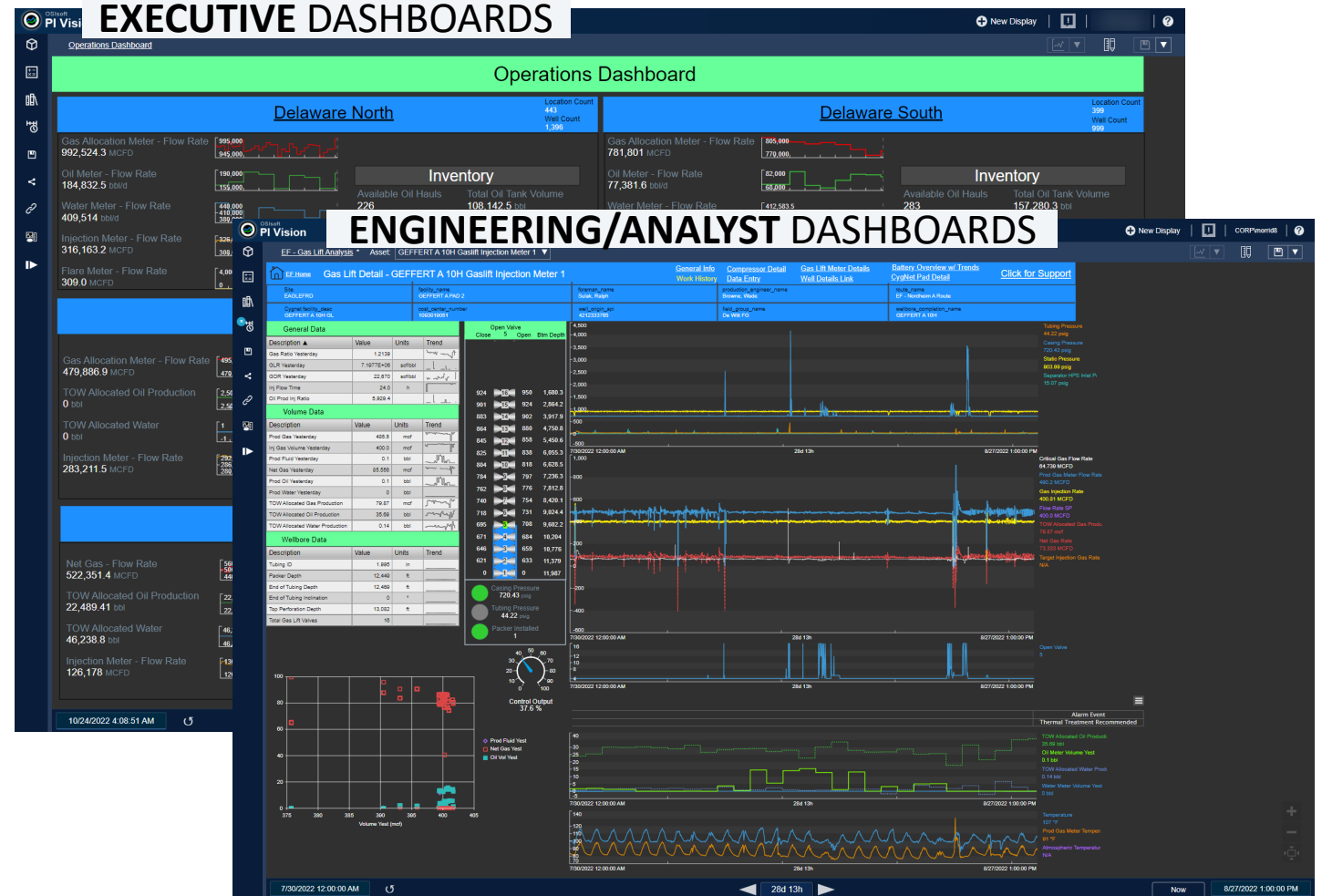
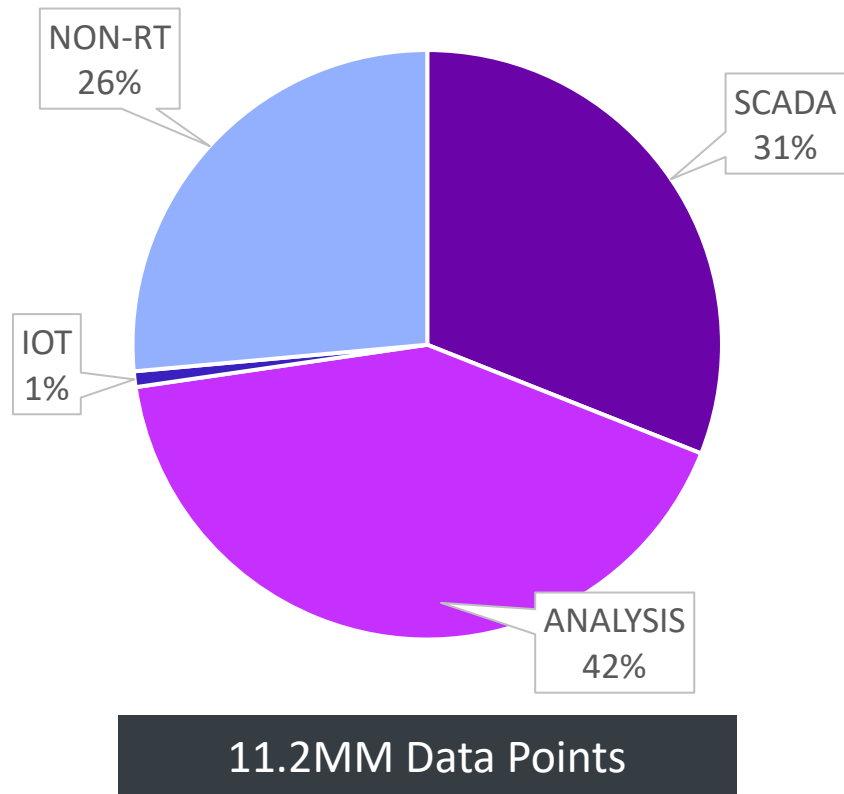
## OUR TECHNOLOGY EVOLUTION



# Data Driven Operations



## TAG COUNT BY CATEGORY



# Using data to react quickly and prevent spills



# Strengthening Our Environmental Performance



## Committed to aggressive emissions targets

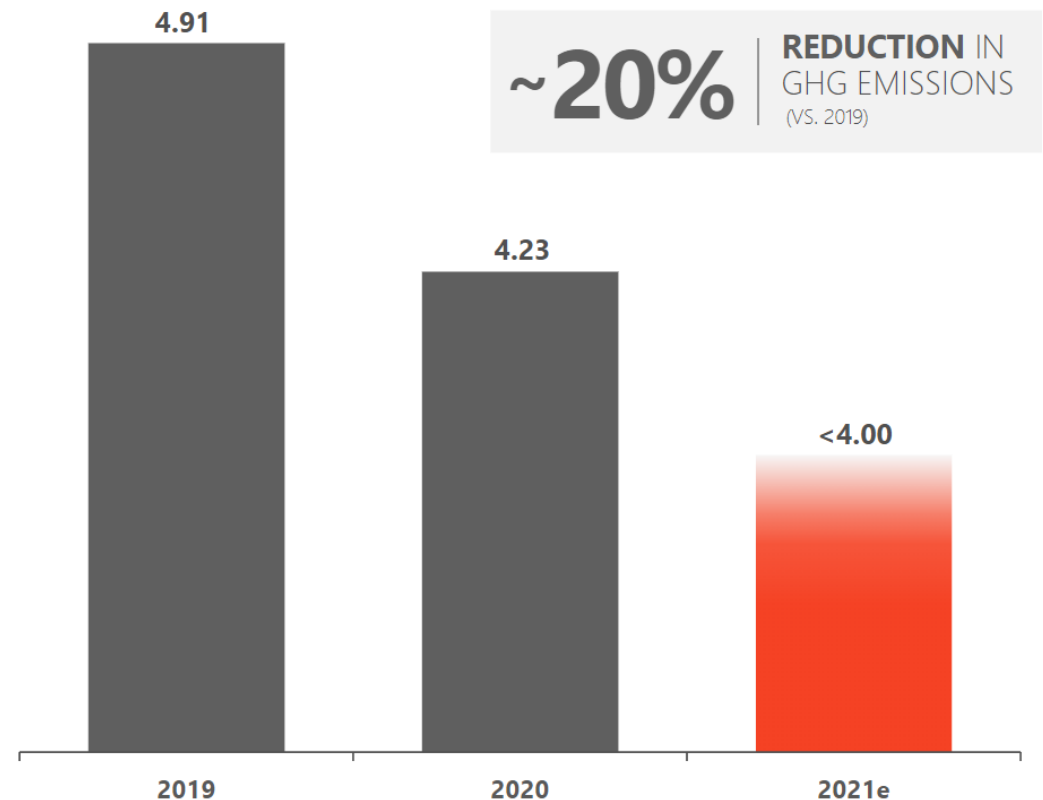
- Joined Oil & Gas Methane Partnership (OGMP 2.0)
- Plan to reduce methane emissions by 65% by 2030

## 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 CO<sub>2</sub>e)



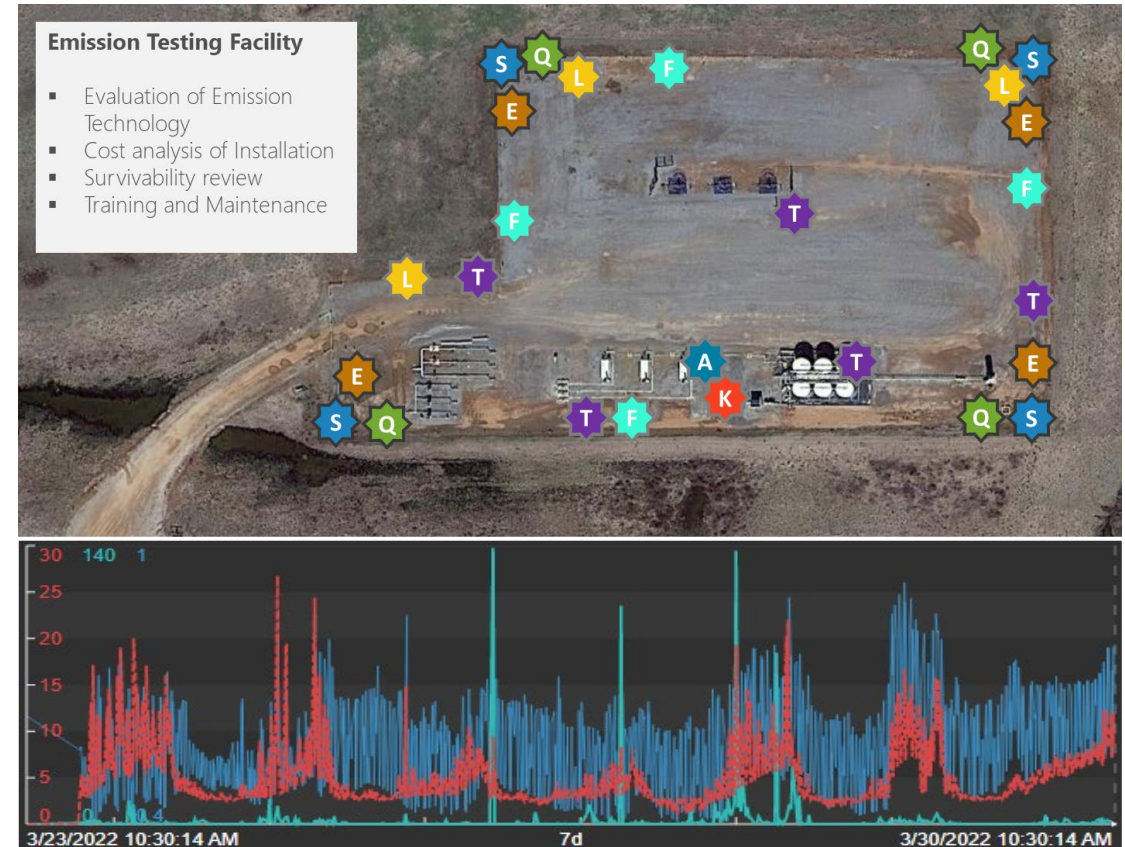


# Emissions / Methane Detection

## 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

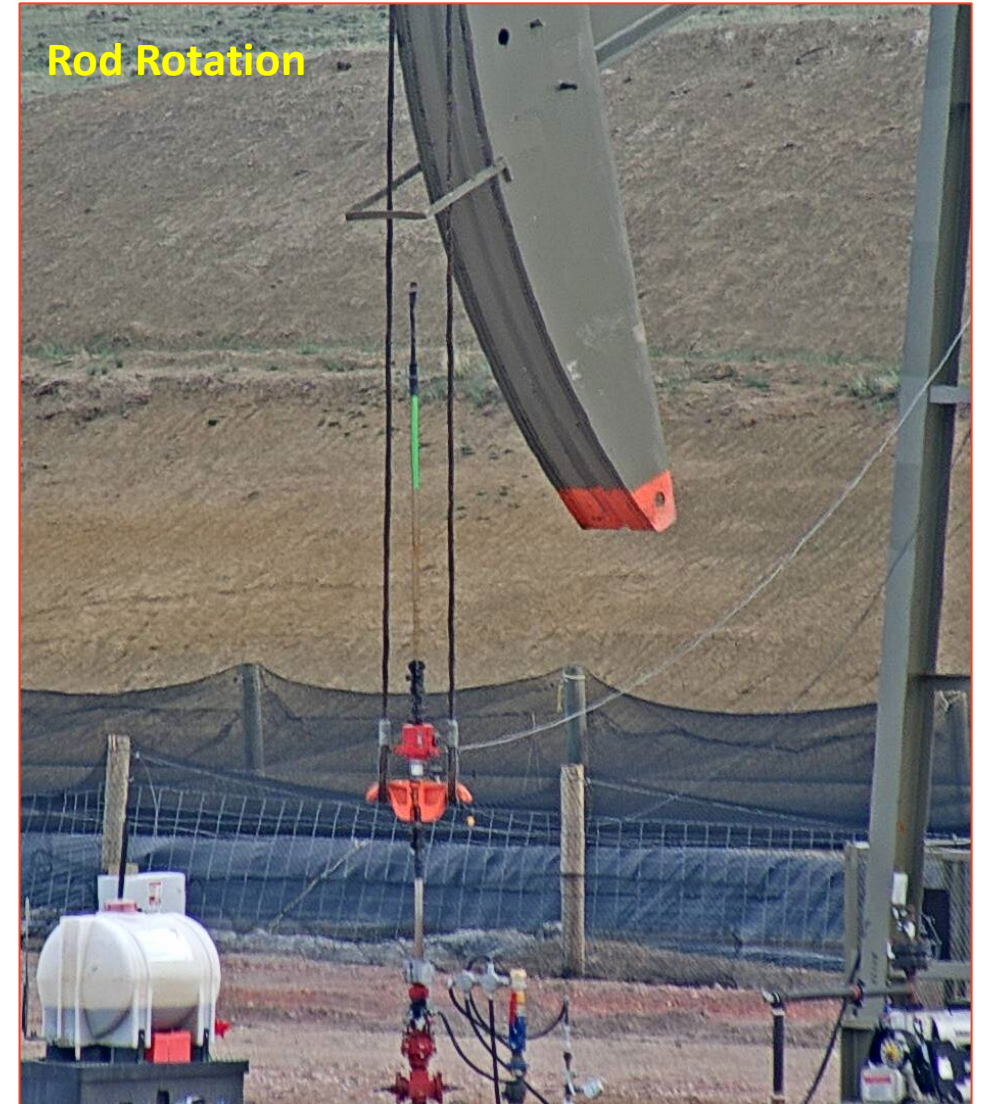
- Working with local electrical Coop
- Generates 5MW of power into the grid
- Enhances stability of electric grid infrastructure
- Renewables can help drive responsible growth



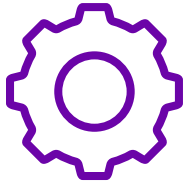


## Image Analytics – Cameras as Sensors

- 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



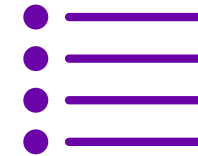
## Challenge

- 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?

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State your name and company.



# Please remember to...

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



# Thank you!