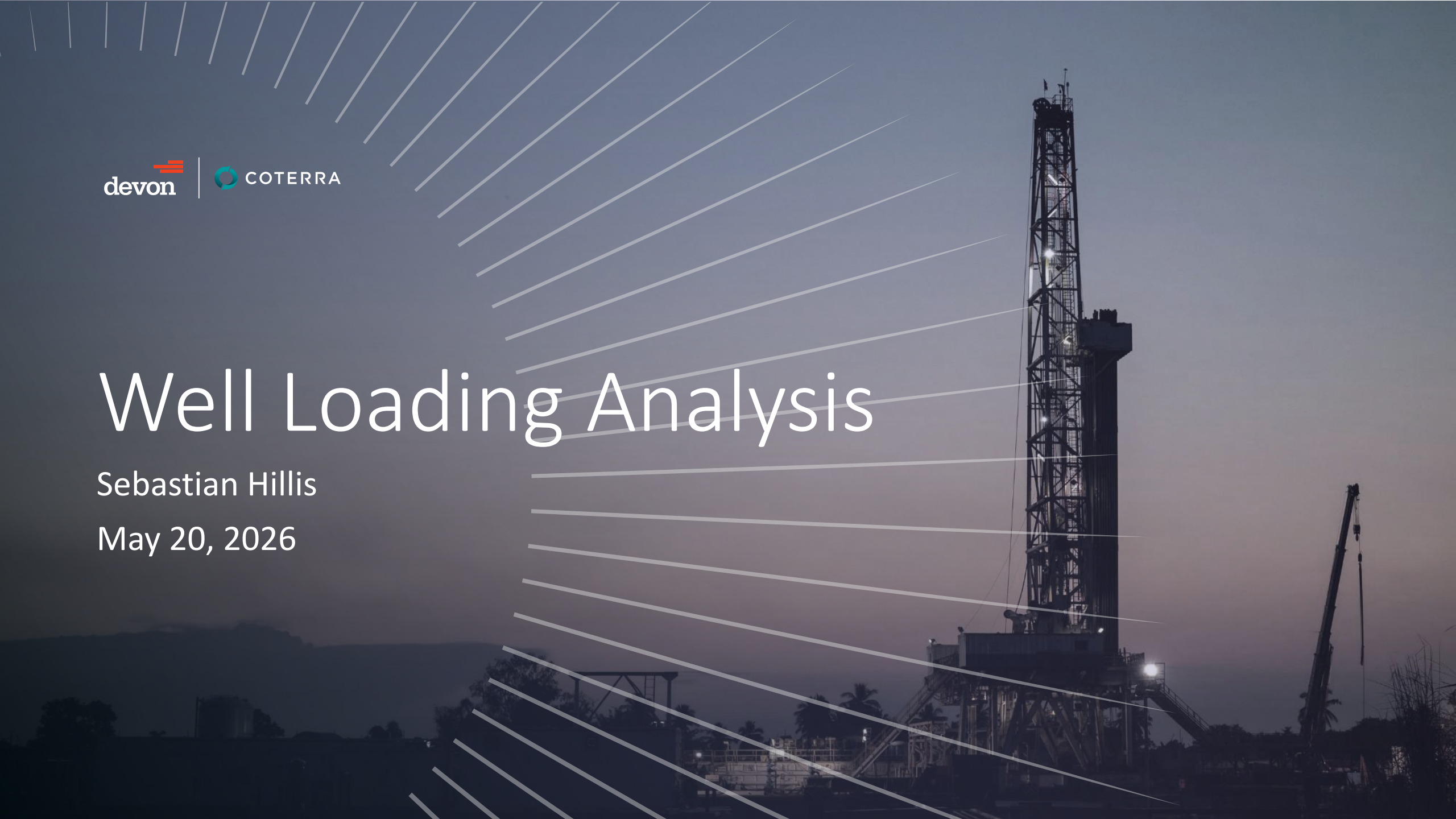
AVEVAWORLD

ACCELERATE INDUSTRIAL INTELLIGENCE



Well Loading Analysis

Sebastian Hillis

May 20, 2026

Agenda

- Introduction
- Company Background
- Problem Statement
- Solution
- Results
- Next Steps
- Conclusion

Introductions

Sebastian Hillis

- ~6 YOE as Automation & SCADA Engineer
- Licensed Professional Engineer in Texas
- Energy, Maritime, Manufacturing, Defense, Water & Wastewater
- SCADA Engineer at Coterra Energy since 2024, Devon Energy since May 7th
- Focus on integrations between SCADA and external applications

Company Background

Devon Energy

- Public U.S. energy company headquartered in Houston, Texas
- Specialize in oil, natural gas, and NGL production
- Formed via merger of Coterra Energy and Devon Energy in May 2026
- S&P 500 component, traded as DVN (NYSE)
- $58B company post-merger, projected to be in top 5 independent U.S. O&G producers by volume

Operations

Production

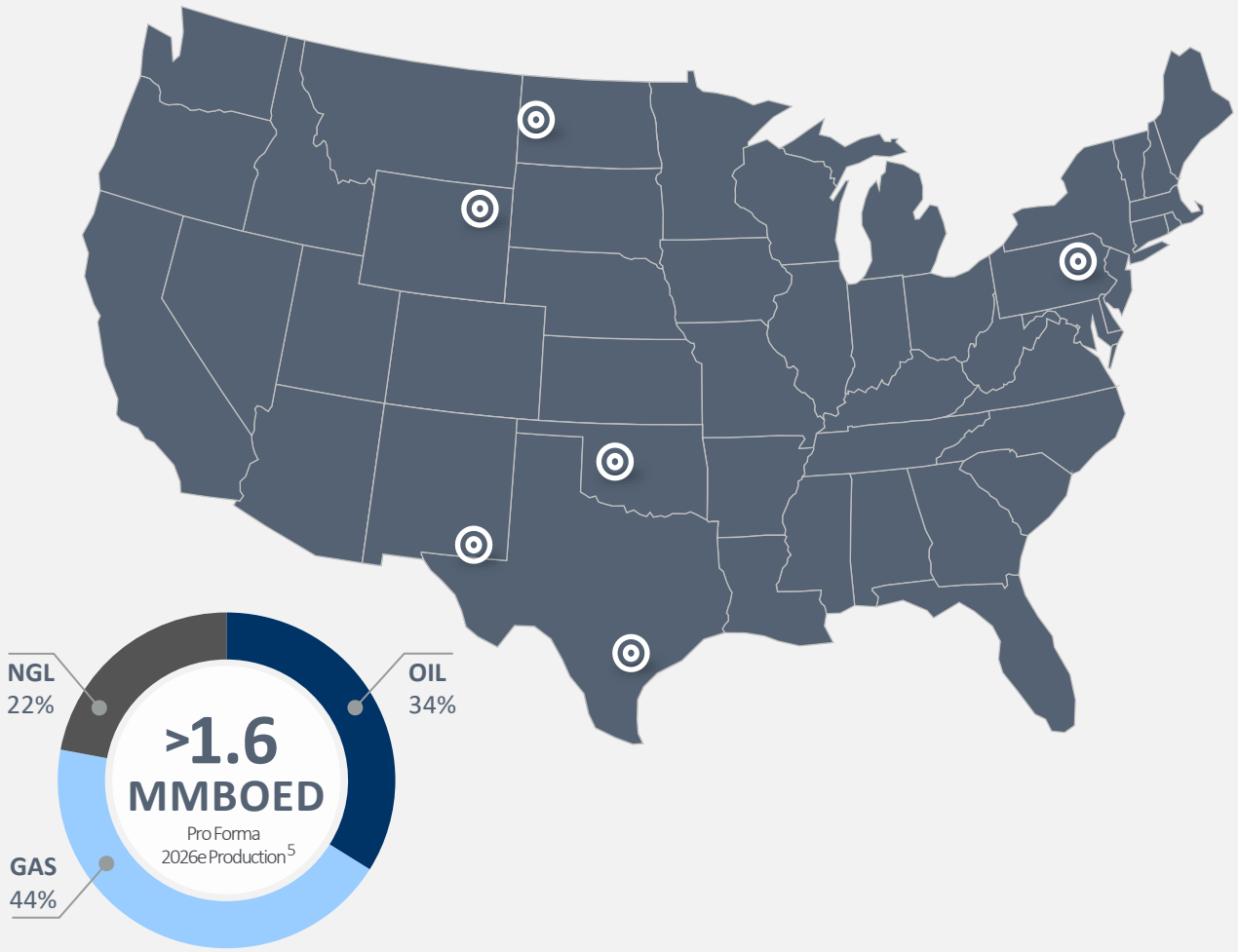
- >1.6 MMBOED post-merger
- >12,000 operated wells across U.S.

Drilling

- Multi-rig drilling program
- Bring >200 wells online annually

Midstream

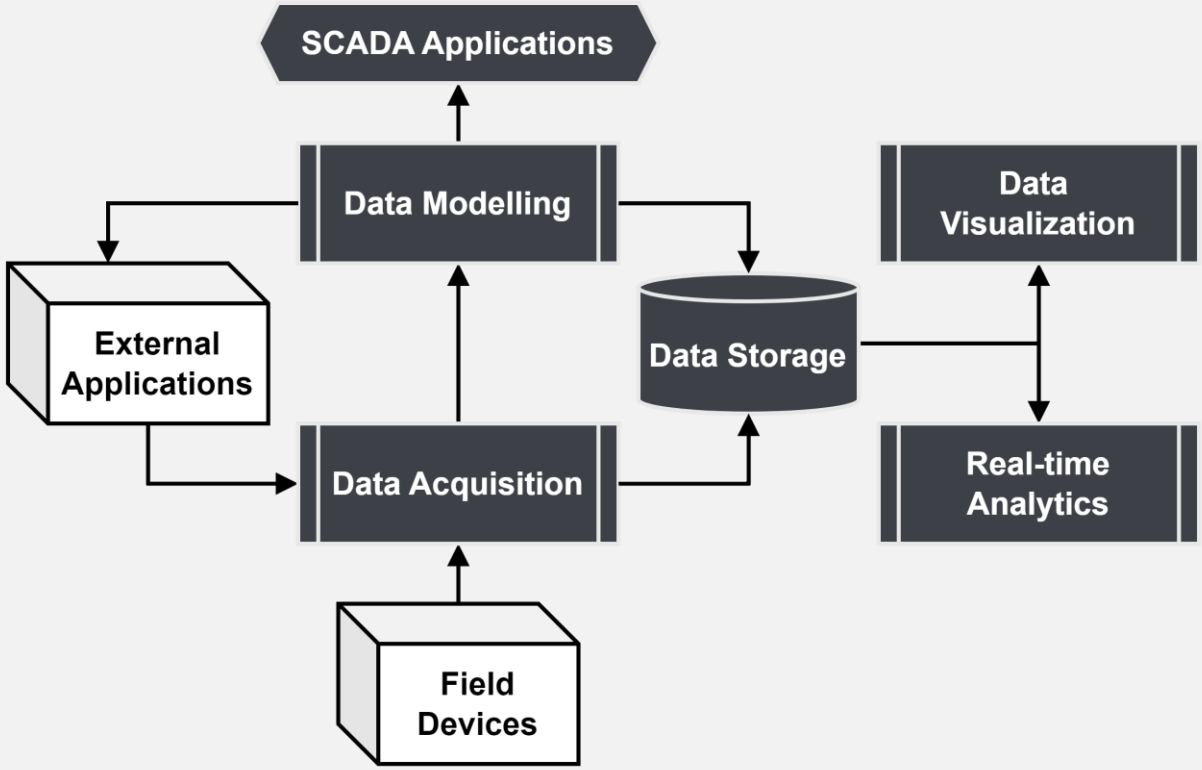
- >600 miles of gas pipeline
- Significant water transportation & disposal systems



Note: See appendix for non-GAAP. 1) As of 1/30/2026. 2) Gross operated inventory locations per Enverus, divided by gross operated wells spud in 2025. 3) Subject to board approval. 4) Pro forma, as of 9/30/2025. Liquidity assumes $3.0 bn revolver remains outstanding. 5) Source: Factset consensus.

SCADA

- Real-time & historical data across production assets
- Centralized asset data model
- >50 servers for data collection, applications, SQL databases, etc.
- >3MM points in AVEVA PI



Problem Statement

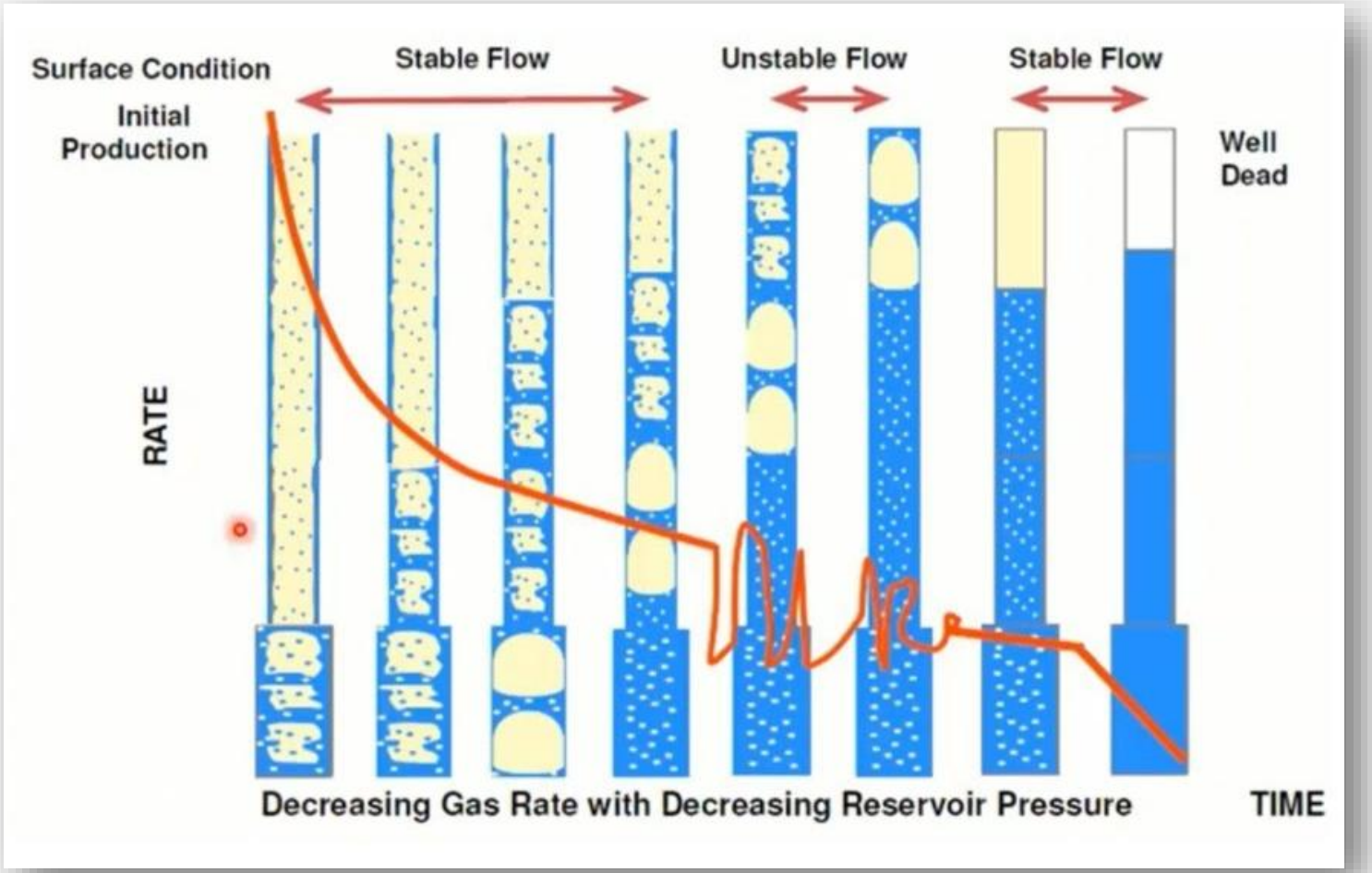
Origin Story

- Ubiquitous Process Upset Problem
- Previous Solutions Inadequate or Incomplete

- AVEVA PI Potential Inspired Re-evaluation
- Advantages Over Previous Solutions

- New Solution Possible with Existing Data Infrastructure
- AVEVA PI Provided Scalable Analysis Engine

Liquid Loading



Problem Statement

Problem

- Liquid Loading Causes Lost Production

Goal

- Minimize losses through early detection & intervention

Design Criteria

Scalable Across Large Asset Base

Near-real-time multivariable analysis

Output actionable events

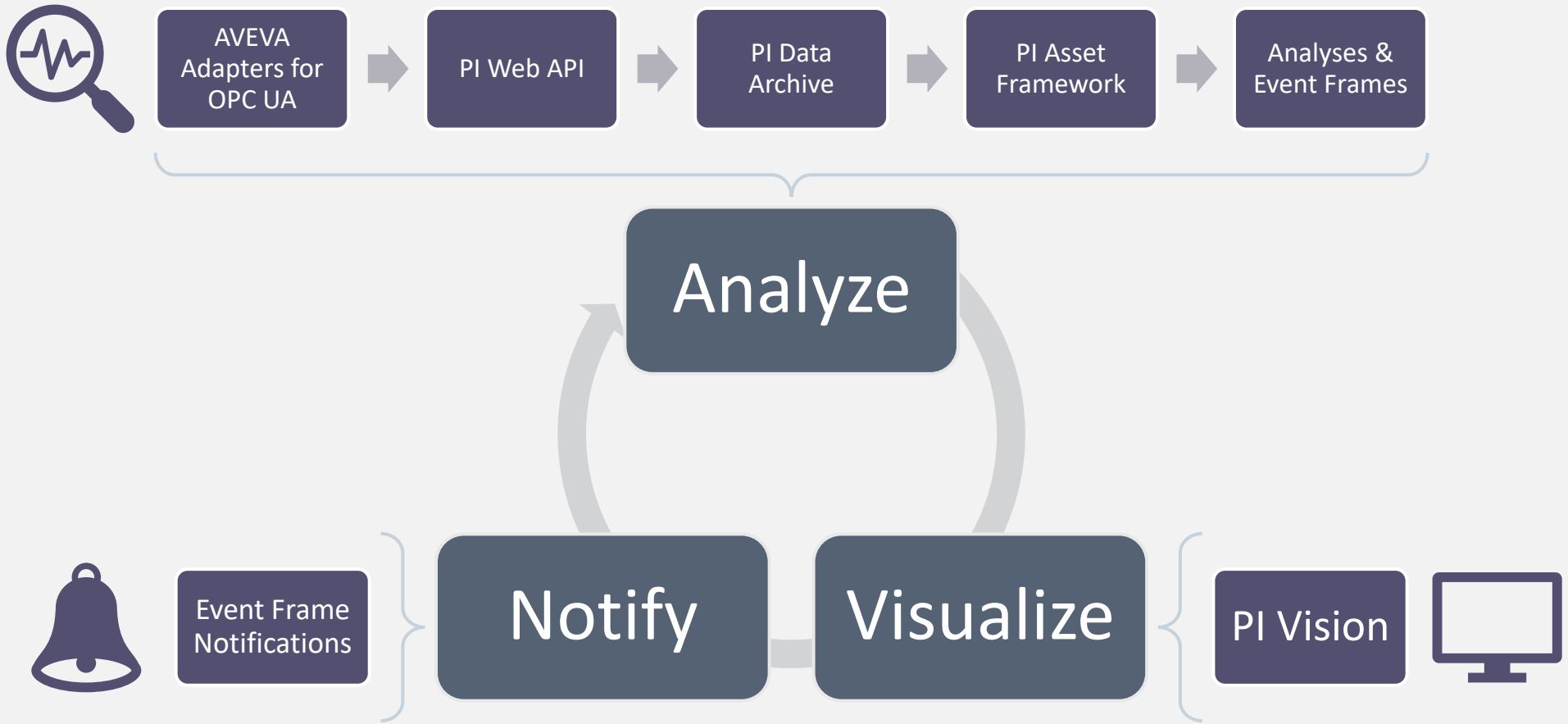
Transparency (no “black boxes”)

Solution

Alternative Solutions

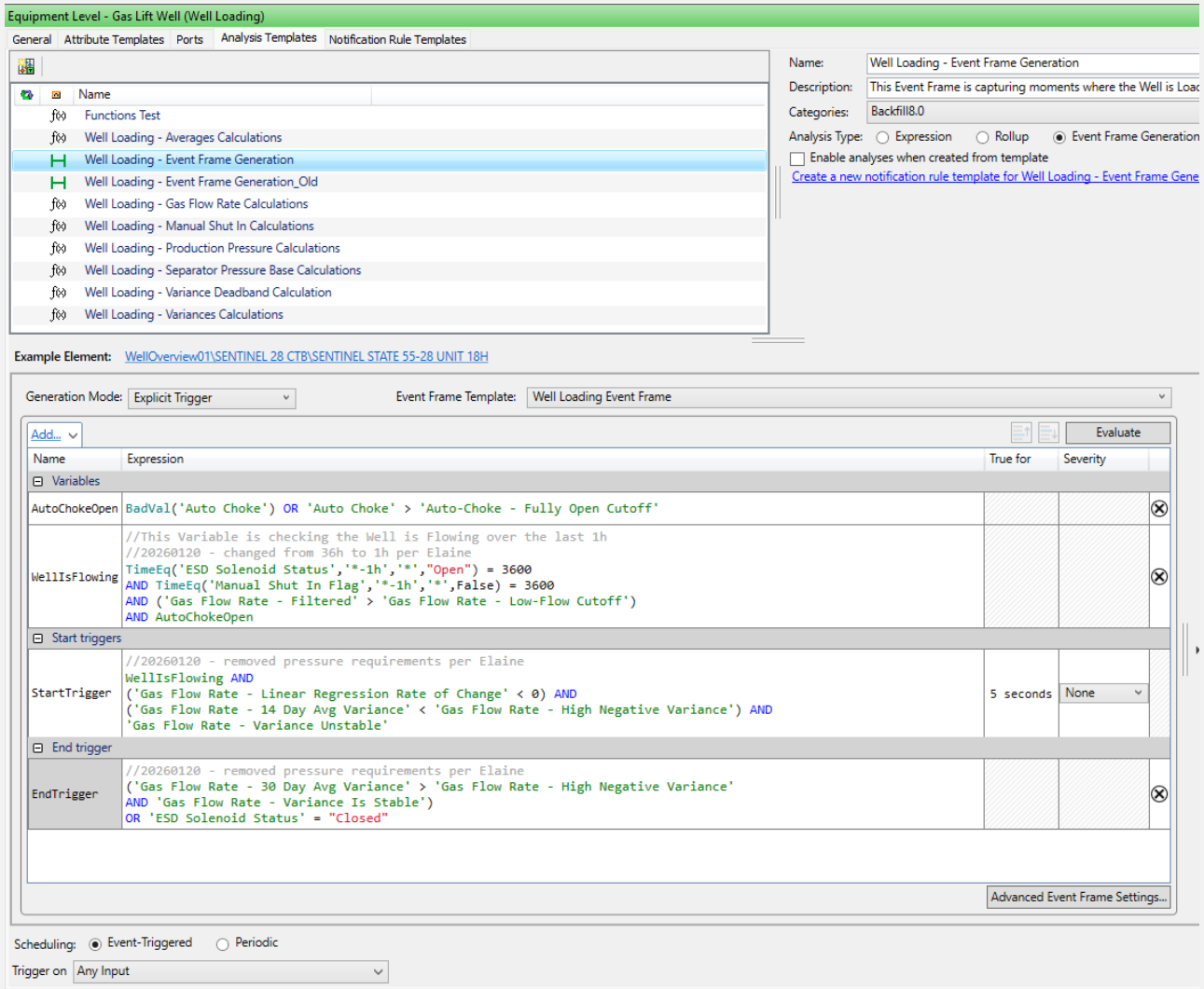
Alternative Solution	Issue	
Increase Injection Rates	• Over-injection • Replaces one problem with another	✗
SCADA Alarm	• Too many process variables • Unwieldy to configure, maintain, and scale	✗
AI/ML	• Lack of event data for training • Higher barrier to entry with existing infrastructure	✗

AVEVA PI Solution

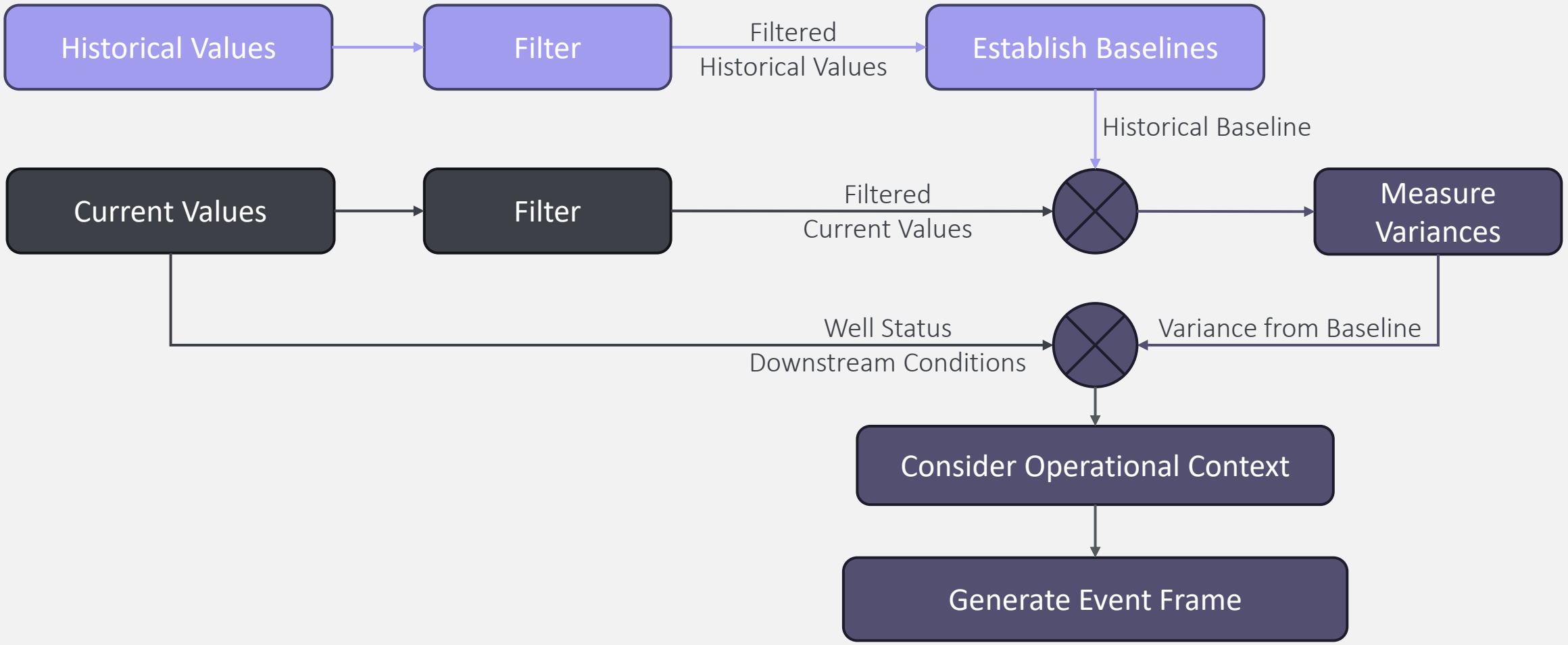


Analyze

- Collaborative effort on general algorithm
- Leveraged existing gas lift well AF model
  - Access to relevant process variables
  - Scalability across asset base
- Iterative approach to:
  - Logic/filtering
  - Execution rates
  - Deadbands
  - Setpoints



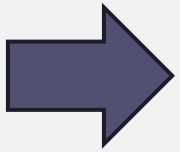
Analysis Flow



Visualize

Design Goals

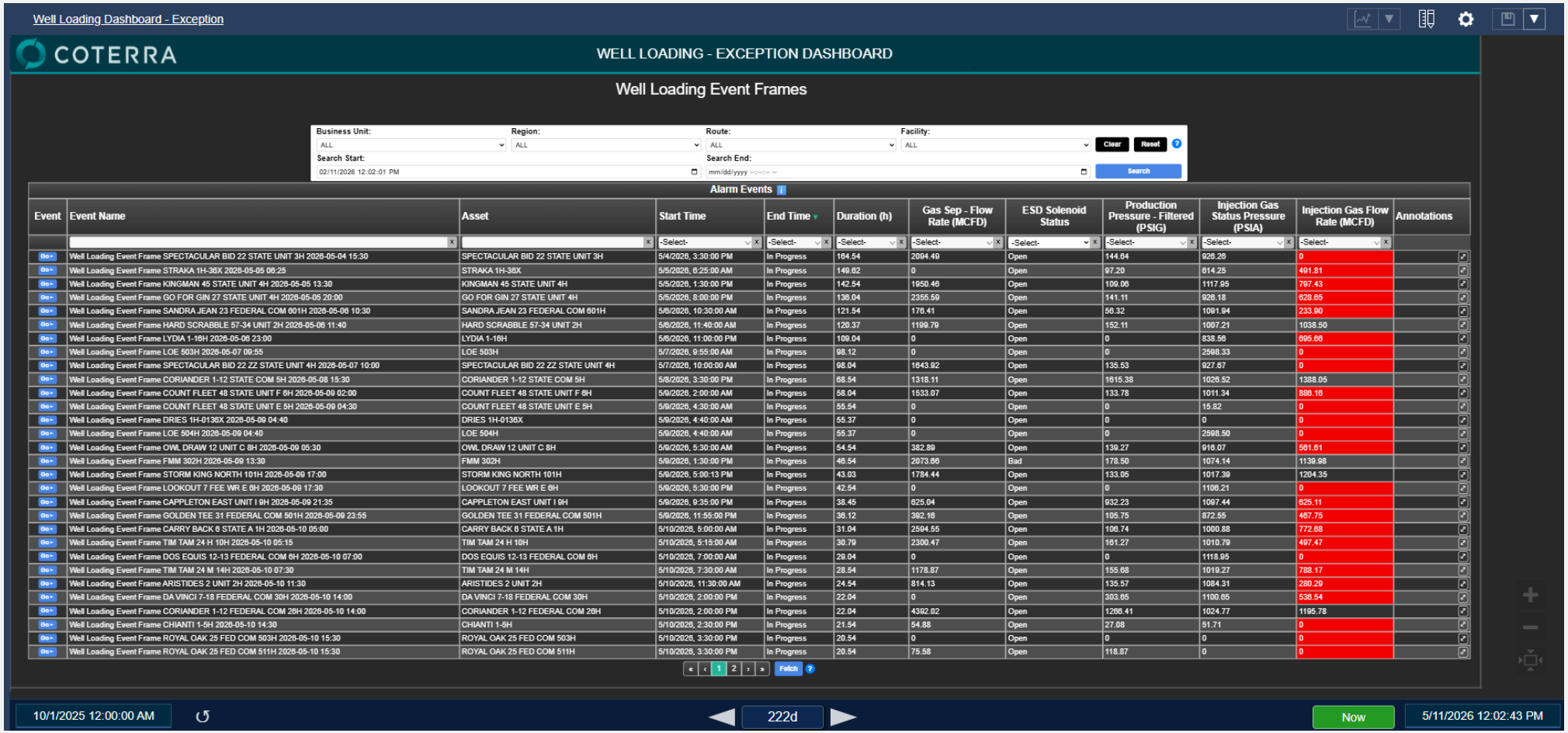
- Intuitive
- Comprehensive
- Accommodate Multiple Job Roles



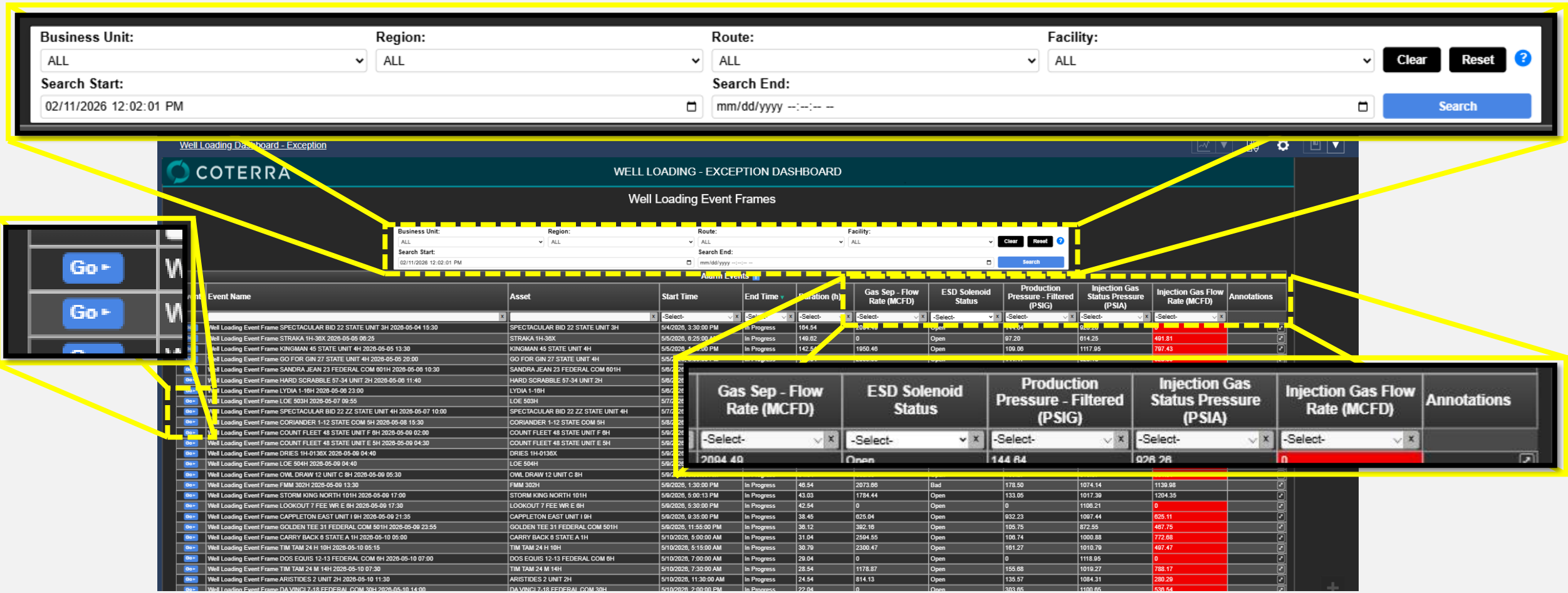
Final Design

1. Overview Dashboard
   - All Event Frames
   - Filterable by Location/Role
2. Drill-Down View
   - Details on Relevant Process Variables
   - Calculations/Setpoints

Visualize – Dashboard



Visualize – Dashboard Detail

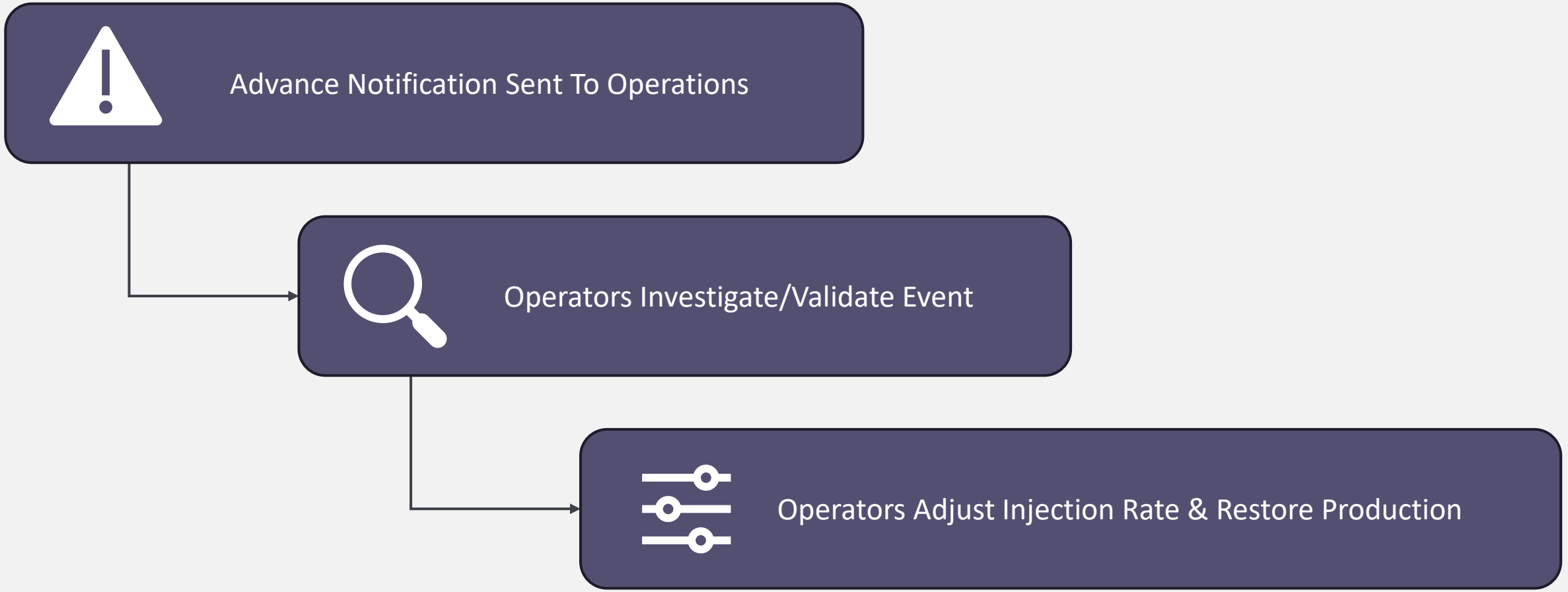


Visualize – Drill-Down

Process Variables

Analyses

Notify


Advance Notification Sent To Operations
Operators Investigate/Validate Event
Operators Adjust Injection Rate & Restore Production

Results

Results

Function	Before AVEVA PI Solution	After AVEVA PI Solution
Event Detection	Luck or shut-in	Advance real-time notification
Analysis	Ad-hoc trending	Automatic, centralized UI
Resource Allocation	Operations occupied restarting shut-in wells	Operations can focus on optimization

Increase Operational Efficiency

Avoid ~6 hrs. downtime per event

Minimize Lost Production

~$7k saved per event

~$4MM saved per year at scale

Centralize Management

Unified system for CI & maintenance

Next Steps

Next Steps

“Meta-Analysis” of Well Loading

Train AI on Event Data

Incorporate Ideal Injection Rate Calculation

Further Automate Operations

Conclusion

Conclusion

- Well-worn operational obstacle causing lost revenue
- Required real-time, multivariable analysis across large asset base
- AVEVA PI provided software platform
- ~$4MM/year in estimated positive financial impact

Q&A


devon
COTERRA