

Continuing Our Champions Program

3:00 PM	Scaling Smarter: Leveraged a Strategic Success Plan to Drive Efficiencies Don Morrison and Justin Milton, Devon Energy
3:25 PM	Empowering Transformation: From Site & Regional Level (The SAR Region) Juliana Fidalgo, Indorama Ventures



Seeq



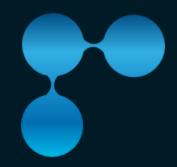
Don Morrison Real Time Data Architect

devon



Justin Milton
Data Scientist





Scaling Smarter: How Devon Optimized Efficiency with Seeq

Don Morrison Justin Milton

Real-Time Systems Architect Data Scientist

Devon Energy Devon Energy



Devon Energy Overview







Portfolio Built to Deliver Sustainable Performance





PREMIER MULTI-BASIN PORTFOLIO

- Acreage resides in top U.S. resource plays
- Underpinned by world-class Delaware Basin position



DIVERSIFIED COMMODITY MIX

- Balanced exposure to oil, NGLs & natural gas production
- Access to premium markets improves realized pricing



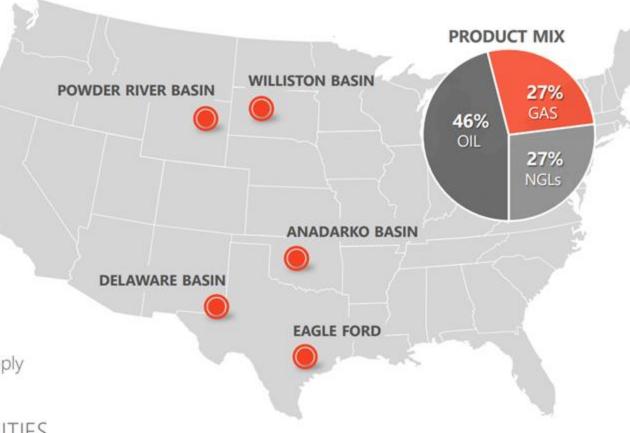
OPERATING SCALE ENHANCES PROFITABILITY

- Low-cost structure drives differentiated margins
- Track record of improving efficiencies & lowering cost of supply



DEEP INVENTORY OF REPEATABLE OPPORTUNITIES

- Possess >10 years of low-risk development inventory
- Upside from ongoing appraisal (>1.5 million acres in U.S. resource plays)





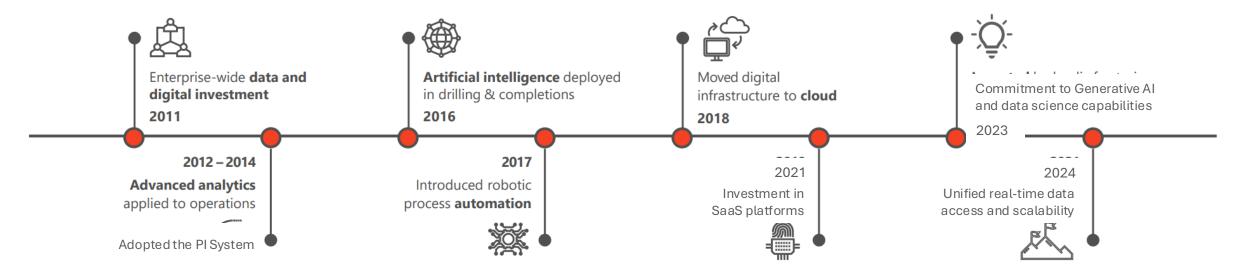


Devon Energy Embraces Innovation





OUR TECHNOLOGY EVOLUTION





Devon Energy + Seeq











Discovered Seeq

"STOP BY THE BOOTH"
- JIM CUNNINGHAM

Challenges

- EXCEL... JUST. STOP. IT.
- NO "BLACK BOXES"
- ENGINEER MATH

Benefits

- DIRECT CONNECT TO PI
- IMMEDIATE FEEDBACK
- FASTER DEVELOPMENT
- SAAS

Scale it!

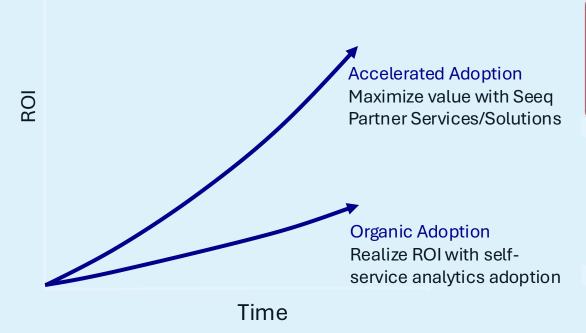
- SCALING TOOLS
- SHORTER TIME TO DELIVER



Seeq Success Plan



Value-centric focus delivering lasting cultural change and scaling use cases to drive digital transformation aligned to business outcomes and ROI























Devon Energy scales analyses across 1000's of assets

CHALLENGE

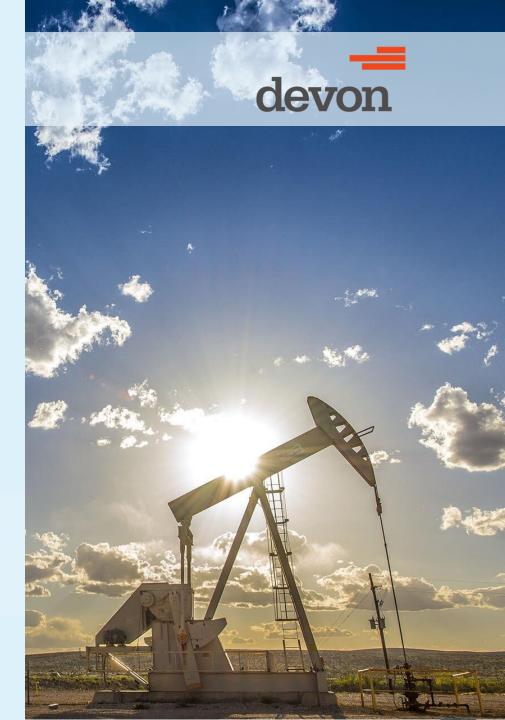
Reduced time to delivery, improved worker efficiency, and reduced integration complexity

SOLUTION

Need continuous monitoring for 1000+ assets

RESULTS

Scaling Tables and Condition Monitor allows us to create, manage, and publish events for 1000+ assets



How We Scaled Analyses in the Past



Custom Code using Seeq API



Databricks jobs using Seeq python SDK (spy)



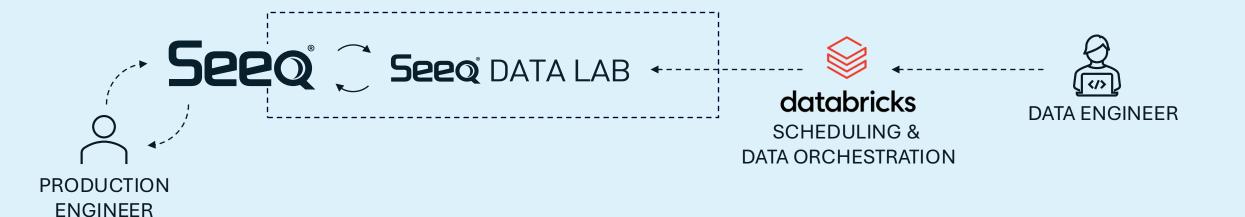
Convert Seeq Analysis to equivalent PI AF Analytic





Seeq Scaling Tool Add-On



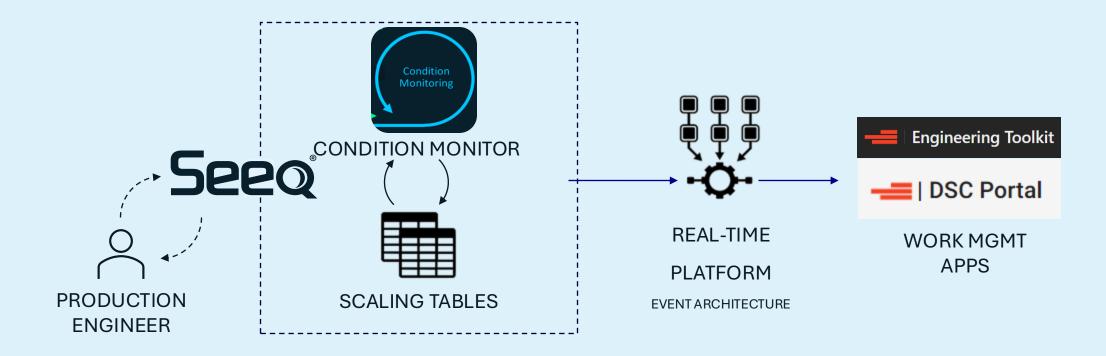


MORE RESOURCES CAN IMPLEMENT & SUPPORT



Seeq Scaling Tables / Condition Monitor





REDUCED COMPLEXITY AND INCREASED RELIABILITY



Devon Real-Time Platform Workflow



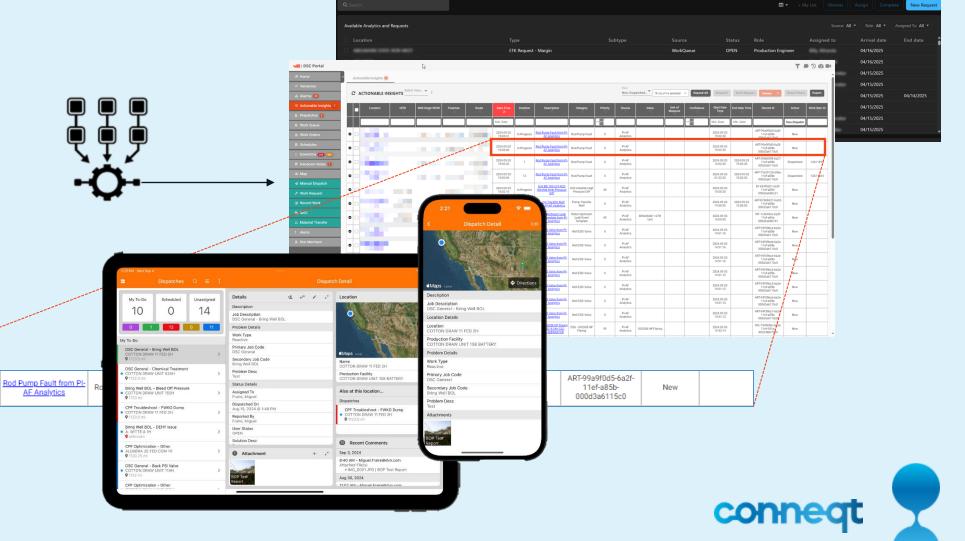


- PI EVENT FRAMES
- Seeq CAPSULES
- DATABRICKS OUTPUTS

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In Progress

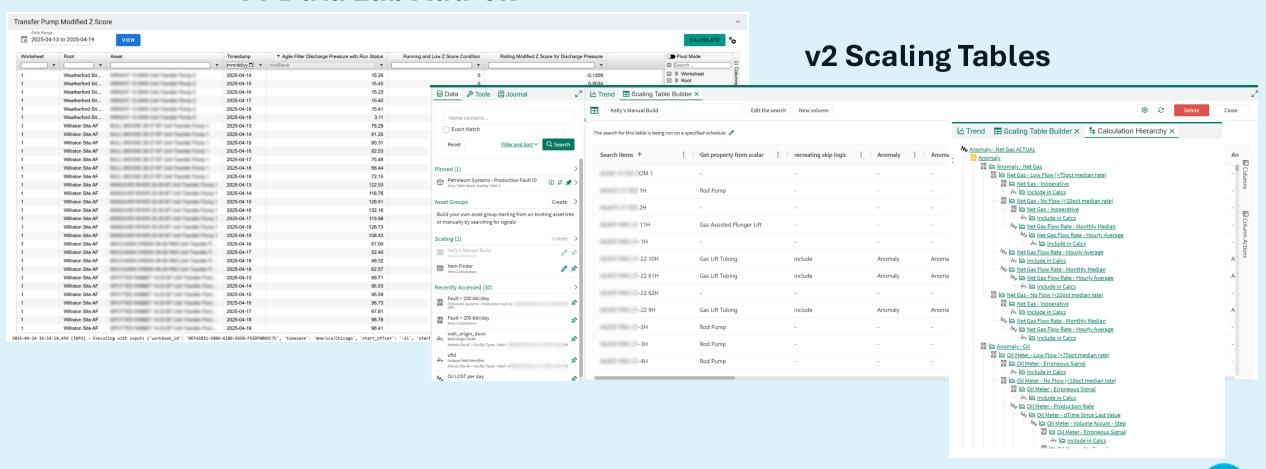


equests assigned to me 145 open unassigned requests 18833 open analytics 0 my list

Scaling Lighthouse Progression

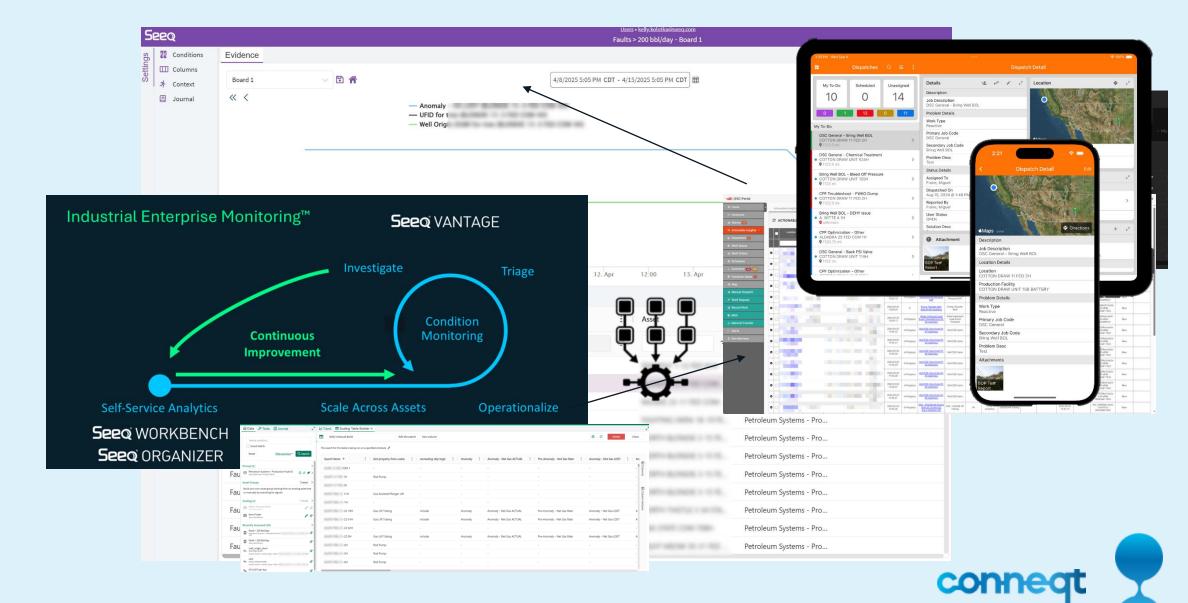


v1 Data Lab Add-on





Seeq in Devon's Workflow



Devon Use Cases



Automated Downtime

- Calculates downtime hours for ~ 6000 wells daily
- Applies different logic depending on the lift method
- Data passed to revenue accounting for allocation purposes

Production Fault

- Like automated downtime but accounts for degraded production as well
- Also quantifies deferred production
- Used for root cause analysis and process optimization



Using Seeq to Scale



- User can submit solution to support team to convert workbench analysis into scaled table and configure condition monitor
- Further reduce skill requirements to implement solutions
- Shorten the time to delivery weeks to days
- Easier to maintain and support
- Ability to manage schedule and orchestration in one place
- Seeq Al integrated with Devon Al



Conclusion



- Building a success plan with the Seeq team helped us set specific goals
- Devon and Seeq teams worked together to achieve each goal
- Having a strategic plan that both teams have committed to is key to success
- Devon has successfully scaled the first use-case on 2800+ assets
- Working on second use-case with 6000+ assets (convert scaling v1 to v2)
- We will continue to push Seeq to make this type of large scale, automated analyses easier!





Don Morrison

Real Time Systems Architect

Devon Energy don.morrison@dvn.com



Justin Milton

Data Scientist

Devon Energy justin.milton@dvn.com

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