October 3-4, 2017 MCM Grandé, Odessa, Texas SHALETECH ShaleTechPermian.com **PERMIAN**

Innovative Big Data Analytics Platform is Helping Reduce Cost & Increase Drilling Efficiency in the Permian

Chris James
Drilling Engineer
Moblize



Overview

Moblize improves the daily lives of engineers in the oil and gas industry via a cloud based big data analytics platform used on over 7000 wells.

Partial Client List





































Featured In





















Improving Daily Life

Let's look at an example of how another platform improved your daily life...

Past

Take a picture with digital camera

Come home to

→ connect camera to

PC

Upload picture to a file folder

Share with recipients

Wait Times, Idle Times, Set Up Times, etc. = Inefficiency

<u>Present</u>

Take a picture via smart phone

Share with recipients

No Inefficiency





Daily Life of Engineers

Planning OpenWells WellView Internal tools Post Well Analysis Excel Spotfire PowerPoint Excel, etc.

Data Agg./Data Prep

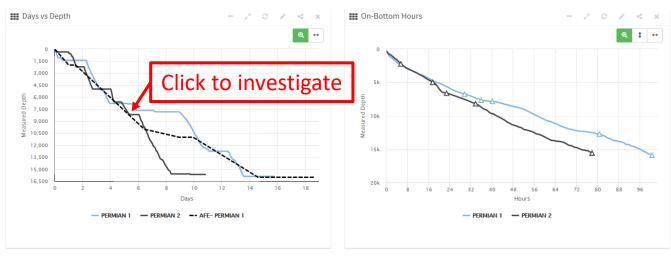
Big Data Analytics

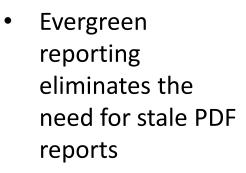
Actionable Insights

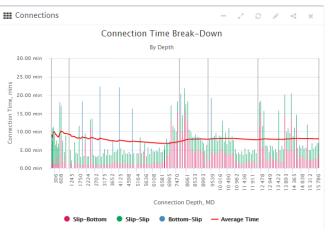
E³ Methodology

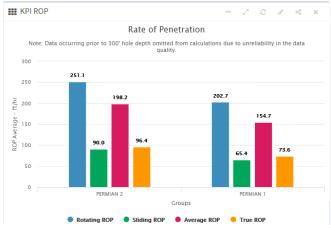


Improving the Morning Meeting





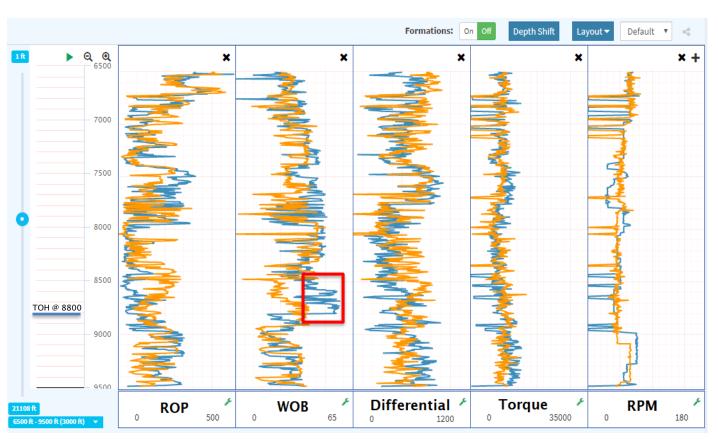




Fuels meaningful discussion and instant insights when more detail is needed.



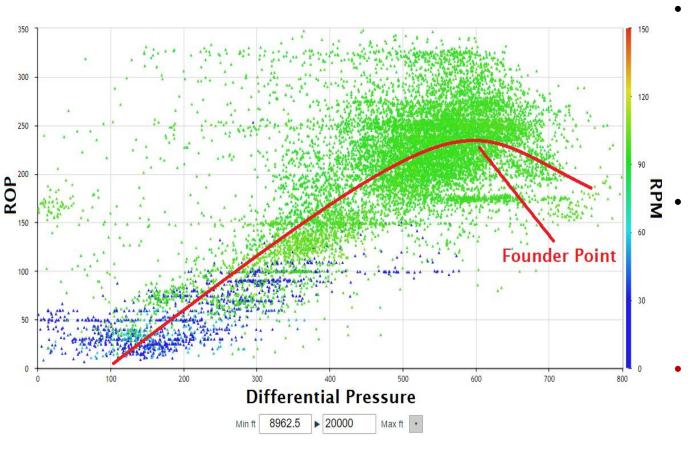
Driving Value from Insights



- Separate facts from fiction by analyzing trends at the parameter level.
- Instantly identify situations where improvements can be made.
- In this example, parameters ran caused failure. Make corrections and save \$60k+ on a future bit trip.



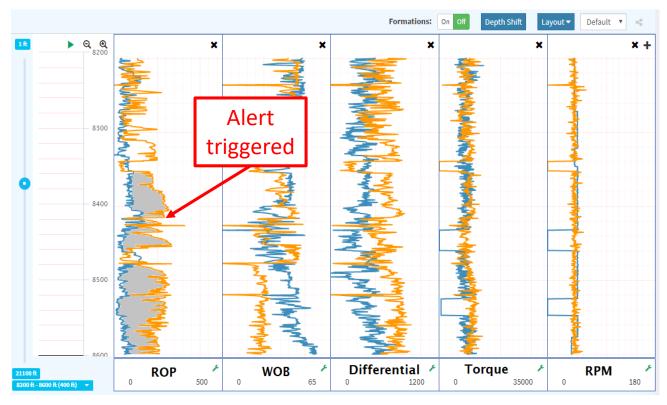
Identifying the Founder Point



- Instantly cross-plot any drilling parameters by depth, hole section, or BHA and send recommendations to the field without delays.
- Zero engineering time spend downloading and preparing data – available anywhere, any time.
 - Easily achieve \$60K+ in savings avoiding trips for tool failures.



Real-Time Alerts to Repeat Best Composite Performance Well-to-Well



- Instead of watching real-time data 24/7, engineers can leverage real-time alerts.
- Example shown: ROP deviates by 20% over 100' in rotation from best composite.
- Save \$50k+ per well getting immediate insights delivered to you for action.



KPIs by Region, Rig, Well, and BHA



- Instant insights from real-time data via a flexible KPI platform, updated second by second.
- Example shown: Evaluate tripping rates by rig and well. Identify underperformers and evaluate rig contractors for future work.

Other examples:

- Evaluate ROPs, slide percentages and drilling parameters by BHA, allowing faster vendor evaluation and tool selection.
- Monitor drilling and tripping connection trends by crew to identify areas for improvement.
- Investigate clean-up cycle duration vs tripping out time to optimize best practices.



Additional Value

Sources of Value

Examples

Dollar Savings

NPT Reduction

Invisible Loss Time Reduction

Engineering Time Savings

Avoid Unnecessary Trips

Extend Bit Runs

- Mitigate Stuck Pipe issues
- Avoid DBRs
- Select Best BHA for Job
- Reduce Connection Times
- Achieve Best Composite ROP
- Optimize Trip Rates
- Reduce Slide %
- Rig Selection
- Spreadsheets
- Morning Meeting Prep
- Reporting

\$100-300K per well

\$100-200K per well

2-3 hours per day



Summary

All services backed by 24/7 well surveillance via our Real-Time Operations Center providing:

- Data aggregation services
- Data preparation services
- Secure hosting
- Dedicated staff Drilling Engineers to ensure user engagement via our E³
 Methodology





Questions?



Using big data analytics to improve the daily lives of engineers, first making humans smarter, not machines.

Chris James

chrisj@moblize.com

