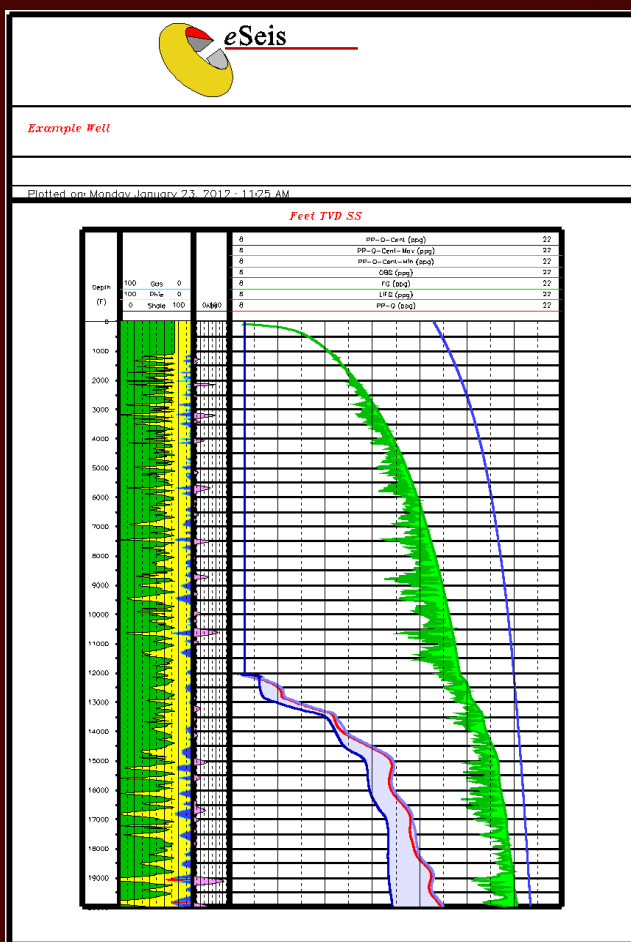




Newsletter

Well design continues to get more complex. However with each well drilled in a given area, the better we get at its design. This demonstrates the learning curve. If we could understand the rocks before drilling we could short circuit the learning curve and save millions of dollars. The corroboration of eSeis with the drilling community has resulted in the creation of the Pre-Drill Mud Log or PDML.



PDML Properties:

- Pore Pressure from seismic velocity
- Pore Pressure from frequency
- Fracture gradient of shale
- Fracture gradient of sand
- Centroid pressure min, avg, max
- Overburden gradient
- Lithology
- Porosity
- Fluids

Testimonial Rick Cody, DW Drilling/Compl. Engineer

Site Specific Predrill rock property predictions via the PDML provides the reqd data to Plan & Drill the Well on paper and, once spudded, affords a comparison every 50' of actual vs predicted [PP, FG, Lithology, Fld Type, MSE, Time-Depth Correlation] using LWD & Mud Log data for confirmation.

This continual verification of predrill vs actual rock data narrows the error bars of the to be drilled formation rock property predictions as the calibration point is only 50' back up the hole.

The PDML provides the data that has resulted in numerous wells' drilled & completed w/ NPT <15%.