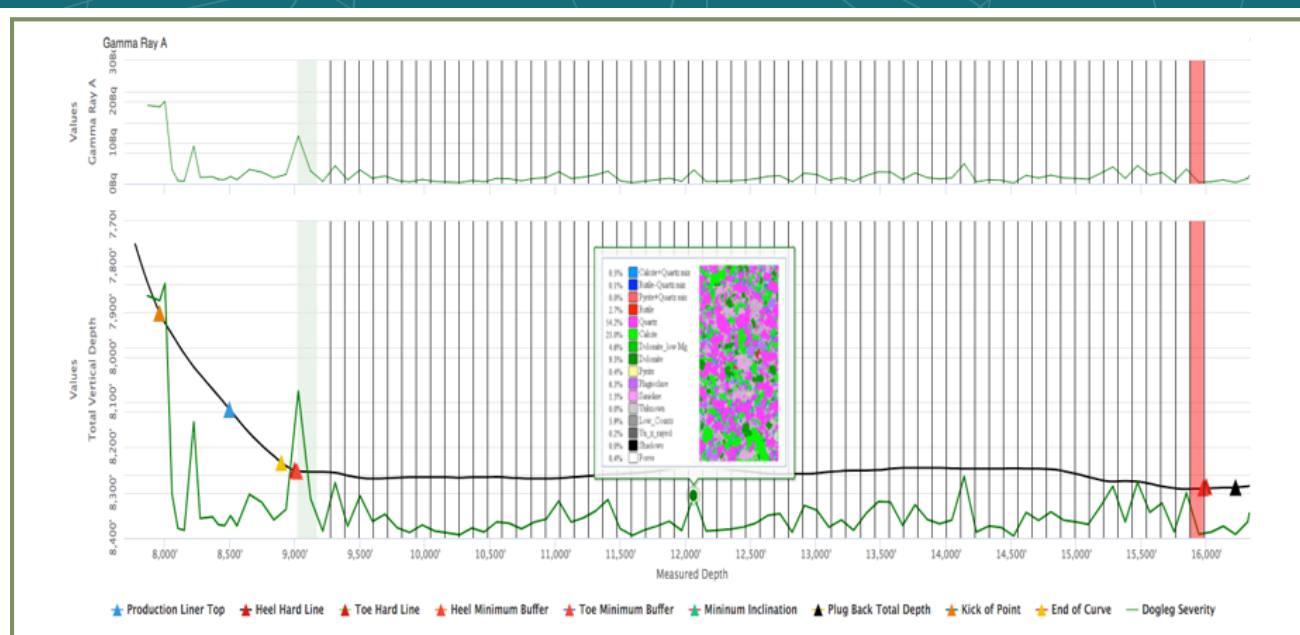


Geoscience Completion Design



Studies using fiber optic cable along unconventional laterals demonstrate that only 40% of perforation clusters contribute to production. This tells us that: a) rock matters in completion; b) 60% of the cost of completions is wasted.

Cost Savings: Completion accounts for about \$5M of the \$8M typical well cost. The above information shows that 60%, or \$3M is applied to perf clusters that produce *nothing*. What if you could use your geoscience to select and perf only productive rock? You could easily reduce that waste by half? That would have a huge impact on well economics.

Production Increase: If only 40% of the perf clusters produce hydrocarbons, what if you could increase that to 50%? That could increase production by up to 25% per well. This would have an even larger impact on well economics.

Applying geoscience to completion design can have a huge impact. Geoscience can be used to group similar rock in stages to provide a more consistent fracture. It can also be used to place perf clusters in the optimal rock. It can also be used to tune the treatment of each stage to match the rock in that stage. The problem has been that the tools didn't exist to bring rich insight from geologists into the completion design process...until now.

DeepData provides a cloud-based tool that enables geologists and completions engineers to collaborate to design better completions. It blends data from log files, drillbit geomechanics, and cutting data. Geologists use DeepData to define the rock, define stages, and place clusters. Then it empowers completion engineers to design their completions and generate all of the operational documents using an efficient drag-and-drop design process. Better wells faster!

Features & Benefits

Feature	Benefit
Load Your Well Constraints: Load information about each well: hardlines, buffers, toe configuration, no perf zones, collar tally, natural faults, and more.	This informs the system which sections of the well can be fracked. With this information, the system can automate most of the design process for you.
Drag-and-Drop Design Using Templates: Load physical templates (stage design) and pump schedule templates. Then simply drag-and-drop these on templates, and we can even auto-adjust them to group like rock and target your clusters.	A geo-aware completion design literally takes minutes. Just drag out various physical designs and pump schedules and you're done. If you want to further refine things, you can drag clusters and plugs to target specific rock properties.
Special Geomechanics (MSE) Design Mode: Using MSE data from drilling, DeepData will place clusters in similar rock for each stage.	This is one of many ways to design your frac in DeepData. Advocates of MSE-based design claim a 19% increase in production through more even fracture development and improved cluster contribution.
Web-Based Tool: DeepData runs in the web so you can login on any computer or mobile phone via your browser. Service Providers can even use it in the field.	Web-based tools make it easy to collaborate with your geologists, labs, service providers, third-party completion design companies, really anyone you grant access to.
Custom Completion Procedure: Load your current completion procedure document and assign fields. DeepData then merges the data for each field into your completion procedure for each well automatically.	If you've ever wasted hours in Word or Excel editing your completion procedure, this automates all of that and enables you to focus on the real value-add of design optimization.
Creates & Distributes Operational Documents: Once your design is completed, the perf plan and pump schedule are generated and sent to the appropriate people.	Don't waste time creating operational documents and mailing them out, all of that is automated for you.
Load All Data: Your cutting data from the lab loads automatically. You can also load any .LAS and then design based on this data.	DeepData brings together all of the data you need in one place enabling you to design the optimal well for improved well economics.

Get Started Today

Design better completions based on each well's unique rock properties...and do it faster than a geometric design in Excel.

