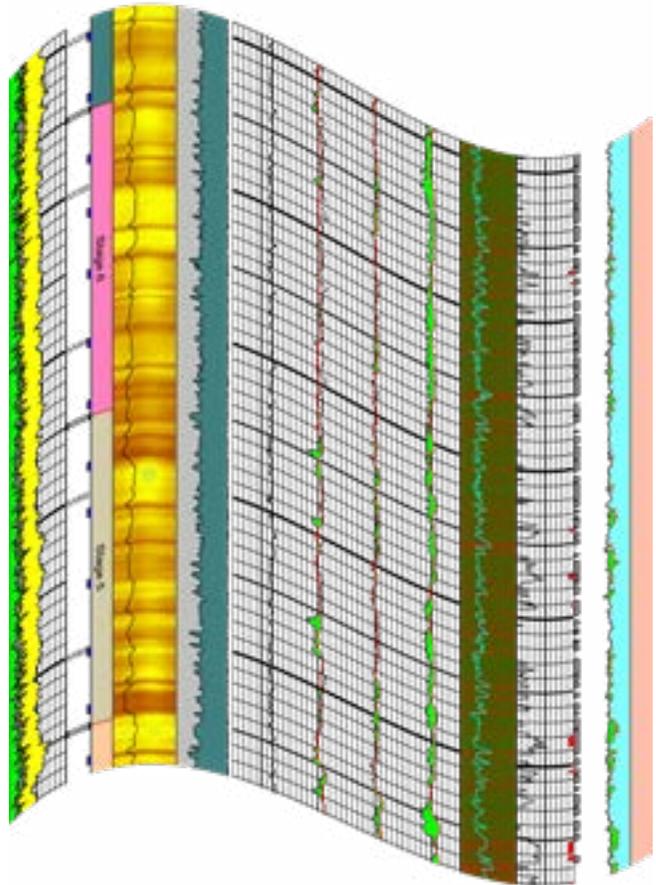


Better Information, Better Results

Deployed via wireline, tractors or pump-down, Wireline Logging Solutions' StageFinder™ Engineered Completion service provides a cost effective formation evaluation method to improve the selection of frac stages and perforation clusters, leading to higher production and/or eliminating stages in both vertical and horizontal wells.

There is no need for an expensive suite of exotic, expensive-to-obtain open-hole logs. StageFinder Engineered Completions service uses pulsed neutron measurements from our multi-detector Reservoir Analysis Sonde (RAS) to determine rock porosity, identify hydrocarbon bearing intervals (oil and gas) and compute water saturation; while the Spectral Gamma Ray tool, which is run in combination with the RAS, delivers very important information for fracturing/ stimulation design, that is clay content and typing.

Based on measurements from these two logs, StageFinder Engineered Completions service makes it possible to assess total pay through casing and determine fracability based on clay-matrix content. Reservoir rock is segmented into stages and perforation clusters based on the frac design, resulting in an optimized completion that can lower well costs.

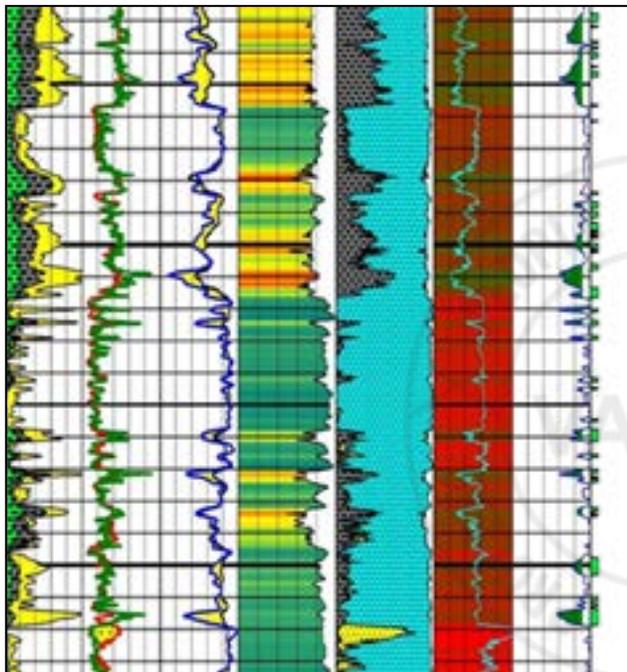
**Benefits:**

- Lower well costs and/or production increase
- Better determine fracability based on clay-matrix content
- Improve selection of frac stages and picking perforation clusters
- Assess total pay through casing in wells where open hole data acquisition is not feasible

Tool Specifications

Reservoir Analysis System (RAS)		
Temperature Rating	320°F	160°C
Pressure rating	15,000 psi	103.4 MPa
Diameter	1 11/16 in.	43 mm
Length	140.7 in.	3573 mm
Weight	44 lb	20 kg
Measure point - Near	84 in.	2134 mm
Measure point - Far	91 in.	2311 mm
Measure point - Long	101 in.	2565 mm
Materials	Corrosion resistant throughout	

Spectral Gamma Ray Tool		
Tool OD	2.75 in	70 mm
Makeup Length	47.7 in	1,212 mm
Pressure Housing Material	Titanium	
Pressure Rating	15,000 psi	
Temperature Rating	320°	160° C
Depth of Investigation	9.5 in	241 mm
Precision	0.50%	
Accuracy	K +/- 0.5%, U +/- 5Kppm, Th +/- 5Kppm	
Maximum Logging Speed	25 fpm	7.6 fpm



In-house petrophysical experts provide quick turn-around of answer products and client support

Combine Operator knowledge with StageFinder to:

- Improve Well Economics
- Target "Sweet Spots"
- Optimize the Completion

Research & Development support from Hunter Well Science.

Call you local Wireline Logging Solutions representative or visit us online.



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