



Pioneer Energy Services

**Computer Processed
Interpretation**

15-141-20,468-00-00

Company Bruce Oil Company LLC
Well Bowen No. 2
Field Kill Creek Northwest
County Osborne State **Kansas**

Location 500' FSL & 2310' FWL

Other Services
DIL/CNL/CDL
MEL

Sec: 15 Twp: 8S Rge: 14W

Permanent Datum Ground Level **Elevation** 1883
Log Measured From Kelly Bushing **5 Ft. Above Perm. Datum**
Drilling Measured From Kelly Bushing

Elevation
K.B. 1888
D.F.
G.L. 1883

Date Recorded 8/26/2014

Depth Logger 2913

Curve Definitions

SW Water Saturation

SXO Water Saturation In The Flushed Zone

VCL Volume Of Clay

PHIE Density - Neutron Crossplot Shale Corrected

BVW Bulk Volume Water

BVWSXO Bulk Volume Water In Flushed Zone

DCAL Caliper

SPC SP Corrected For Baseline

DGA Apparent Grain Density

Payflag If: PHIE > 2, VCL < 40, SPC > -10, SW < 50 & DCAL < 11

Recorded By J. Long D. Fischer

Witnessed By Bob Peterson

Analysis By T. Martin

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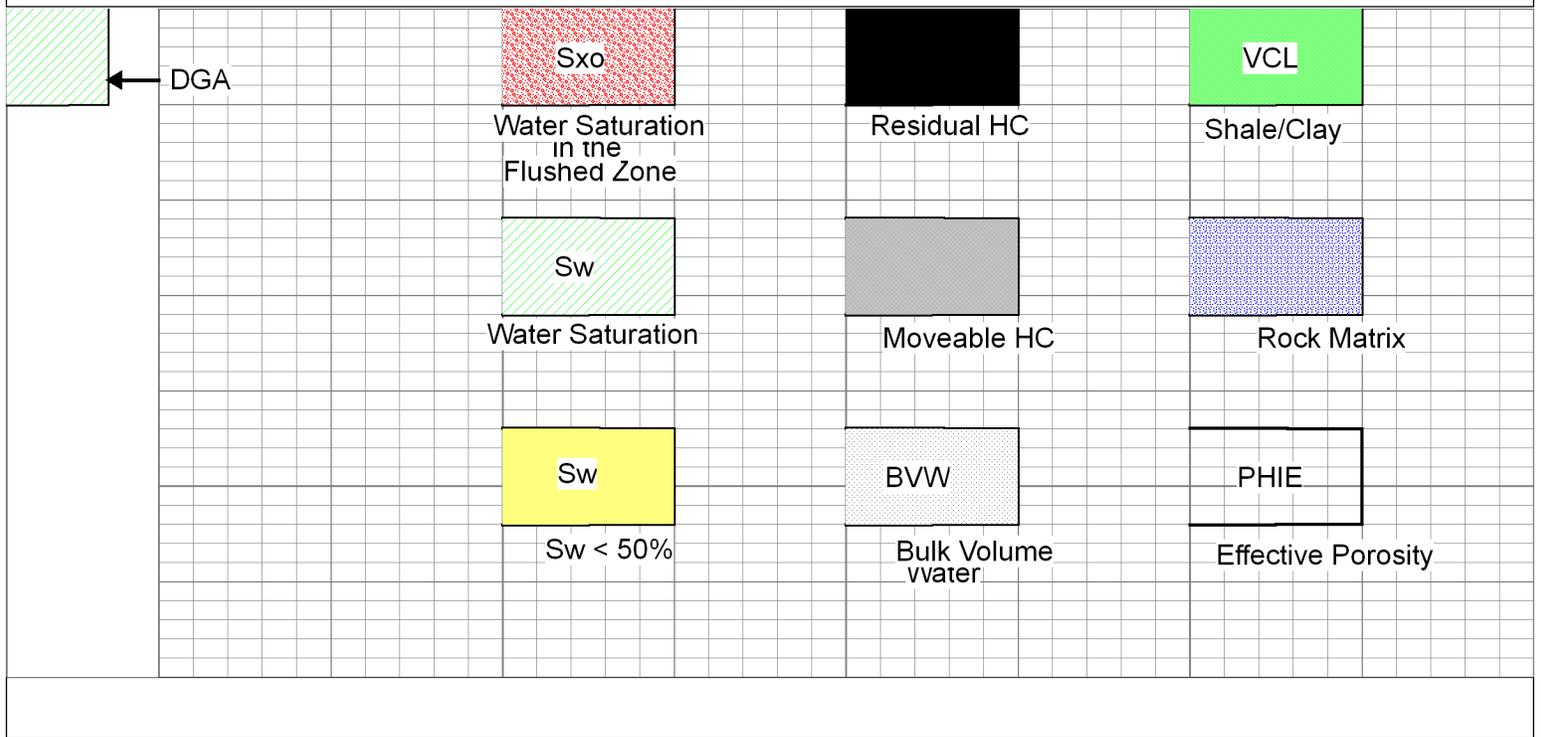
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

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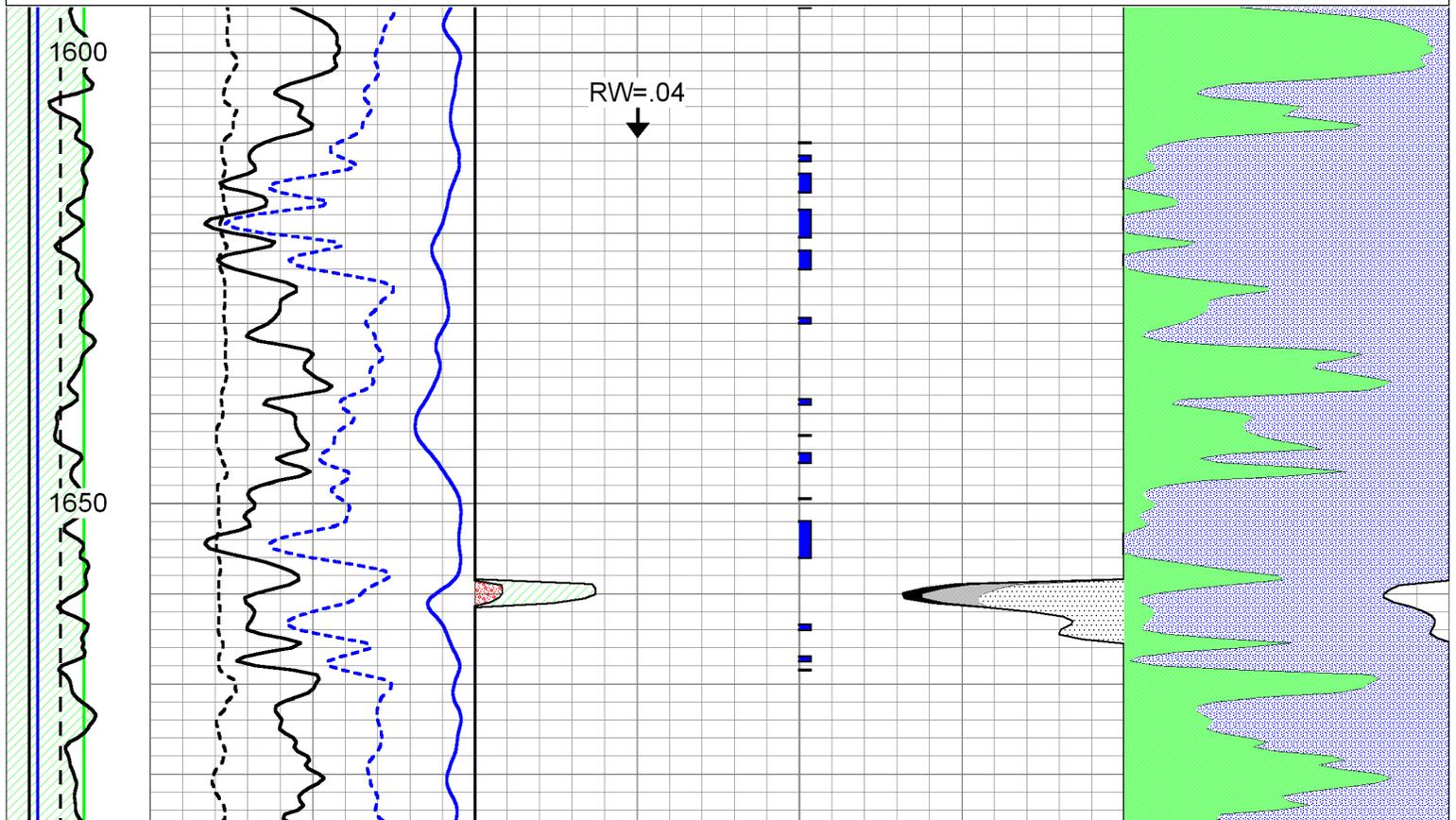
Natoma KS., North on 290th to Stop Sign, East to 250th, North to "T", East to 200th, North to Dead End, West Into Through Green Gate.

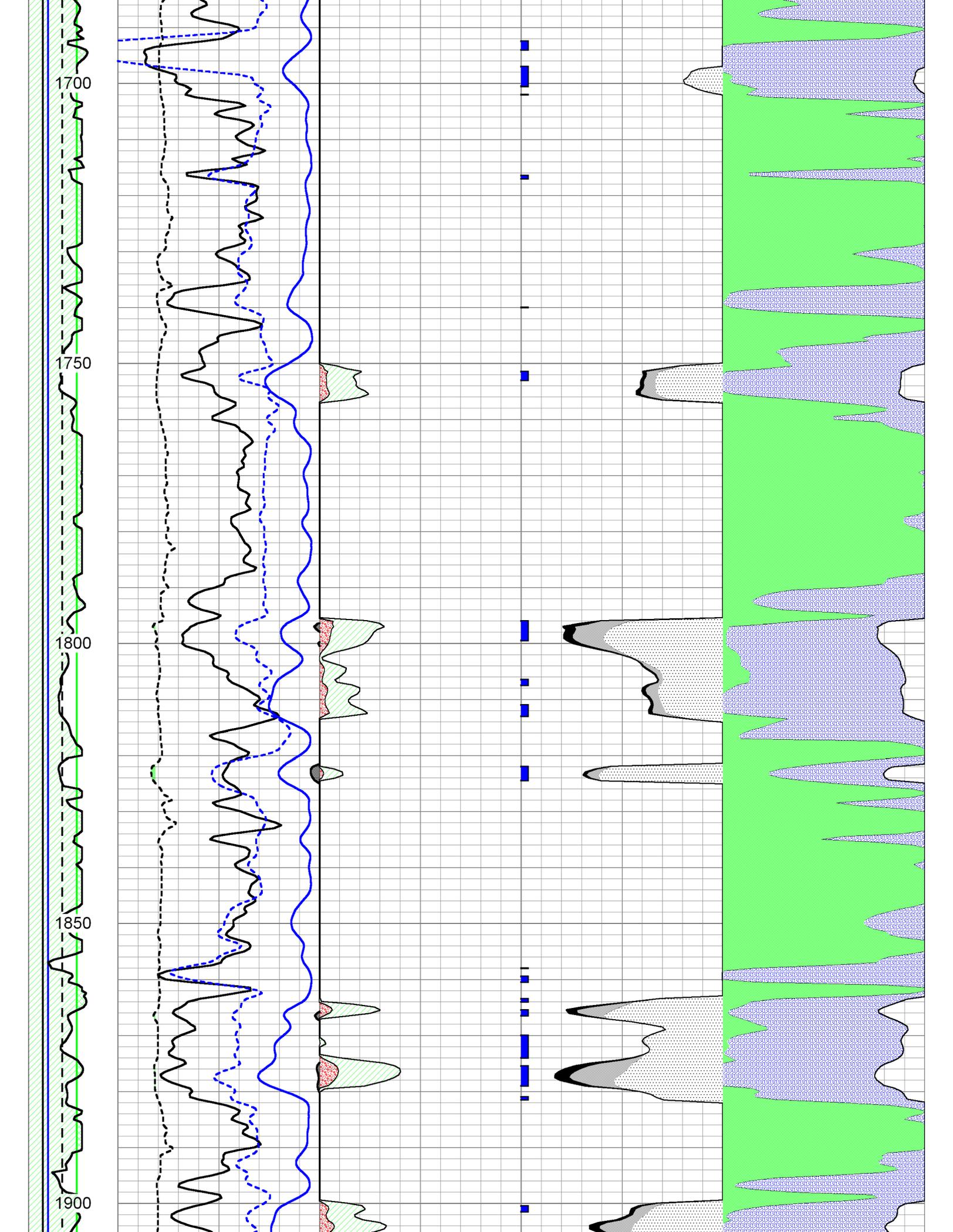
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Charted by: Depth in Feet scaled 1:240

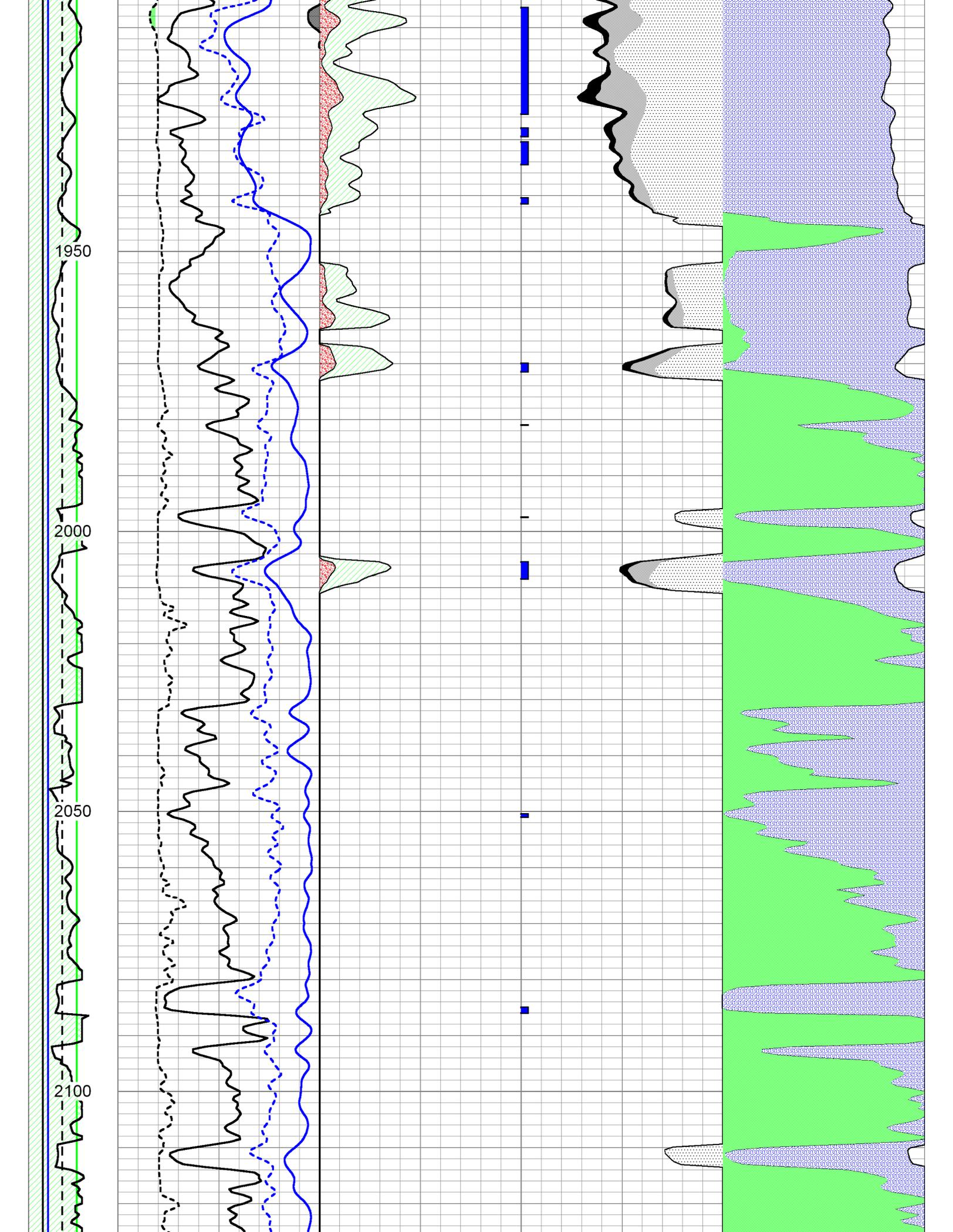


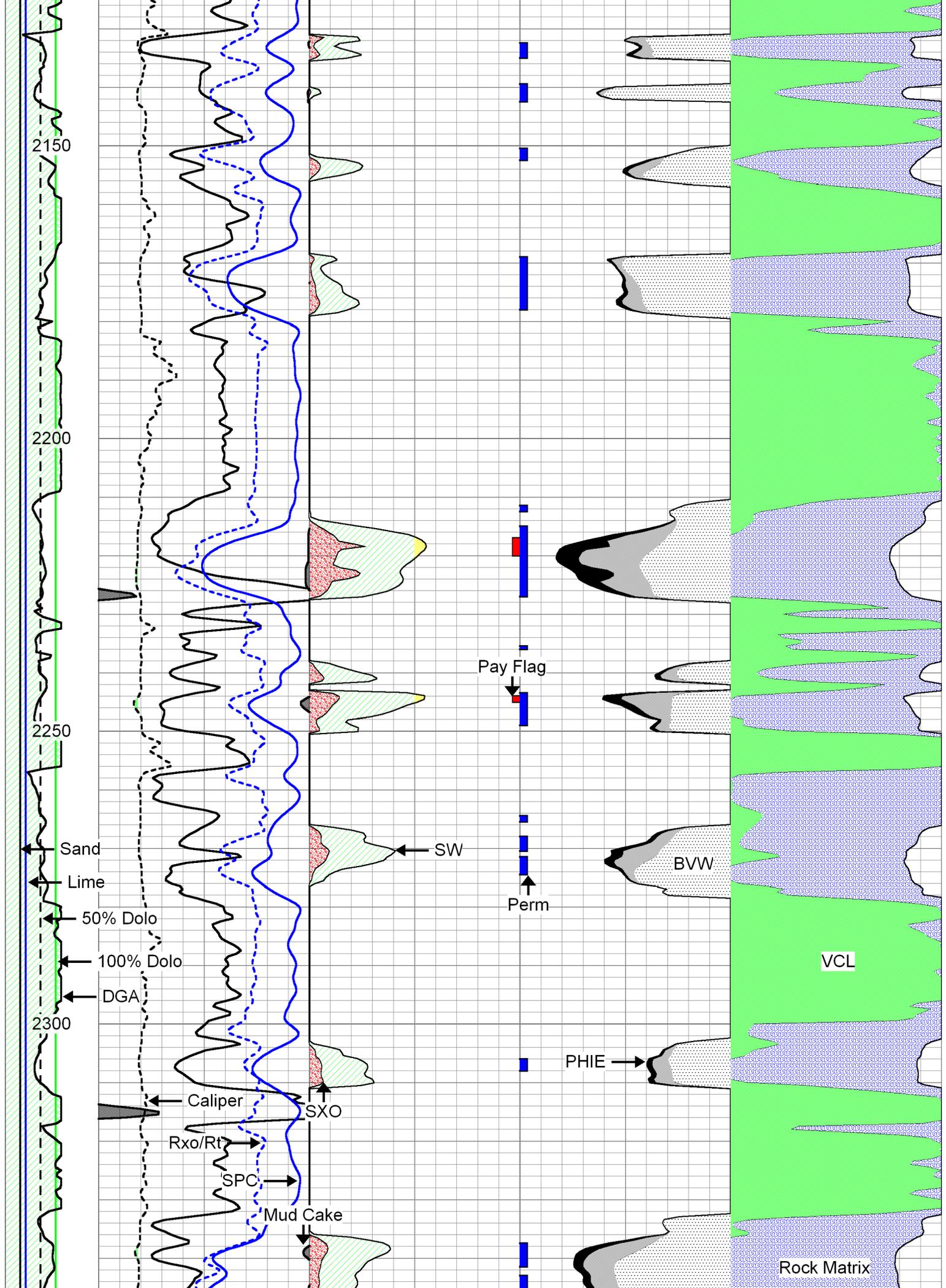
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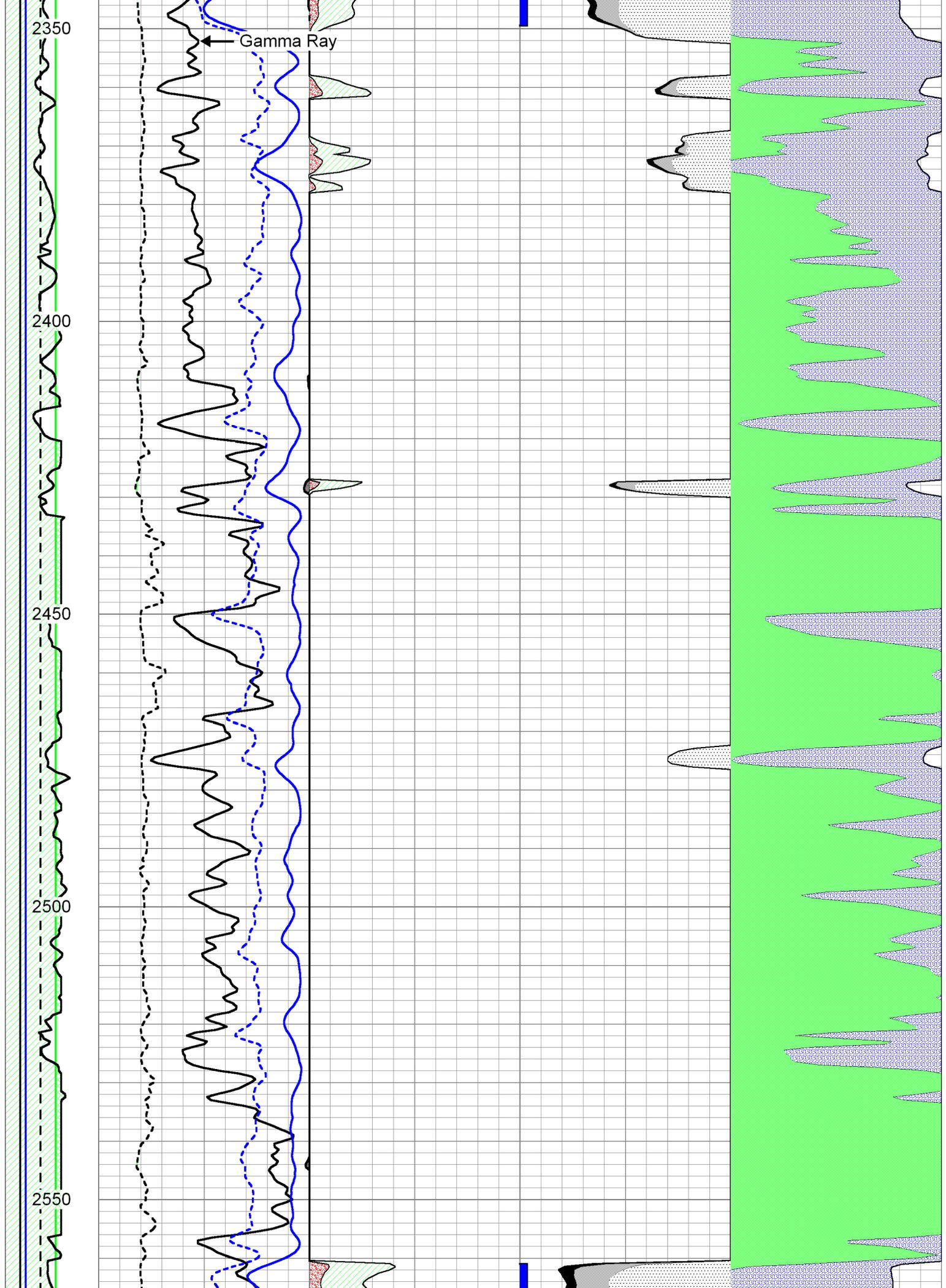
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2.6	3.1	6	DCAL (GAPI)	16	30	PAYFLAG	0	0.3	BVW	0	1	PHIE	0
		-150	SPC (mV)	0	1	SXO	0	0	PERM	30			
								0.3	BVWSXO	0			

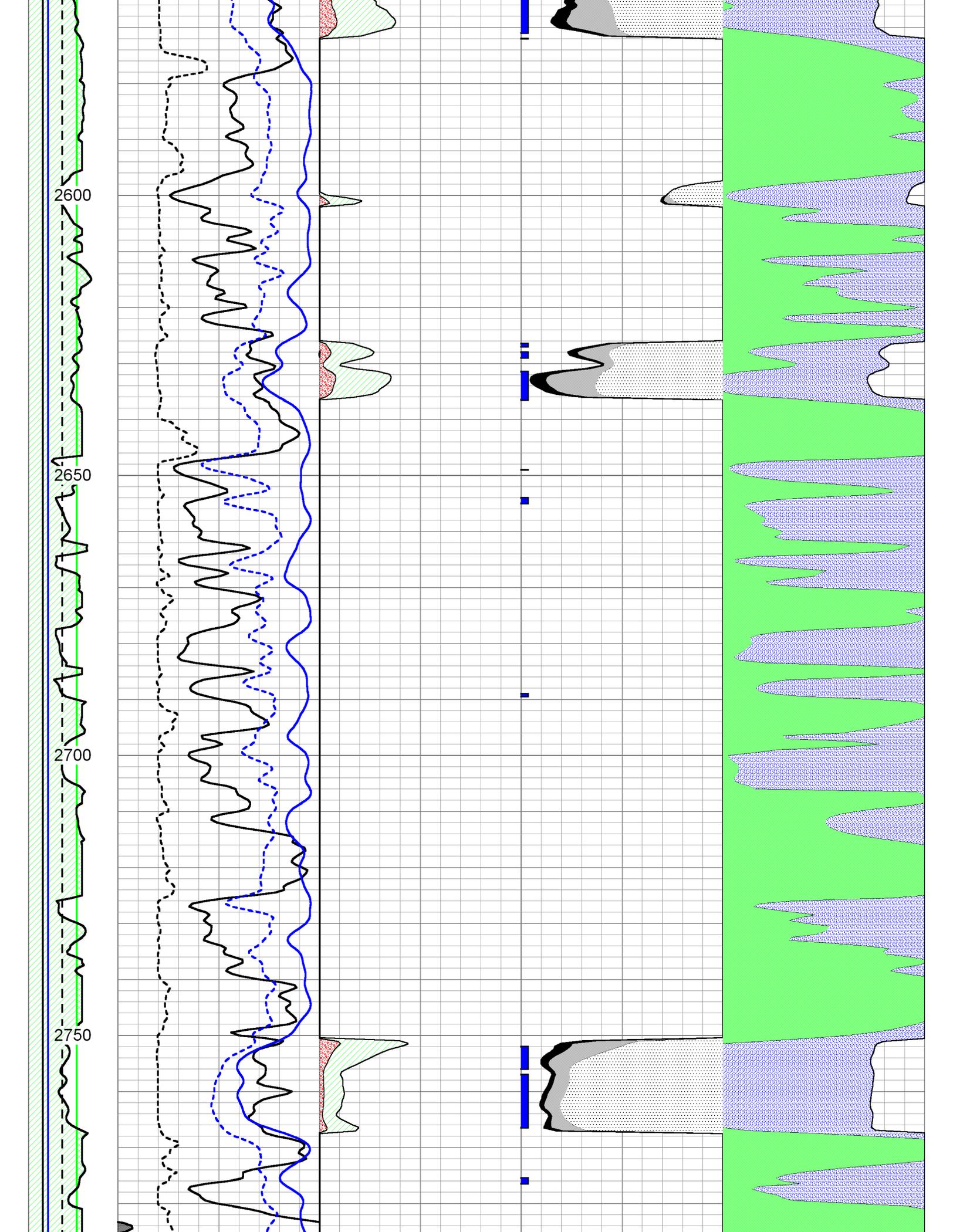


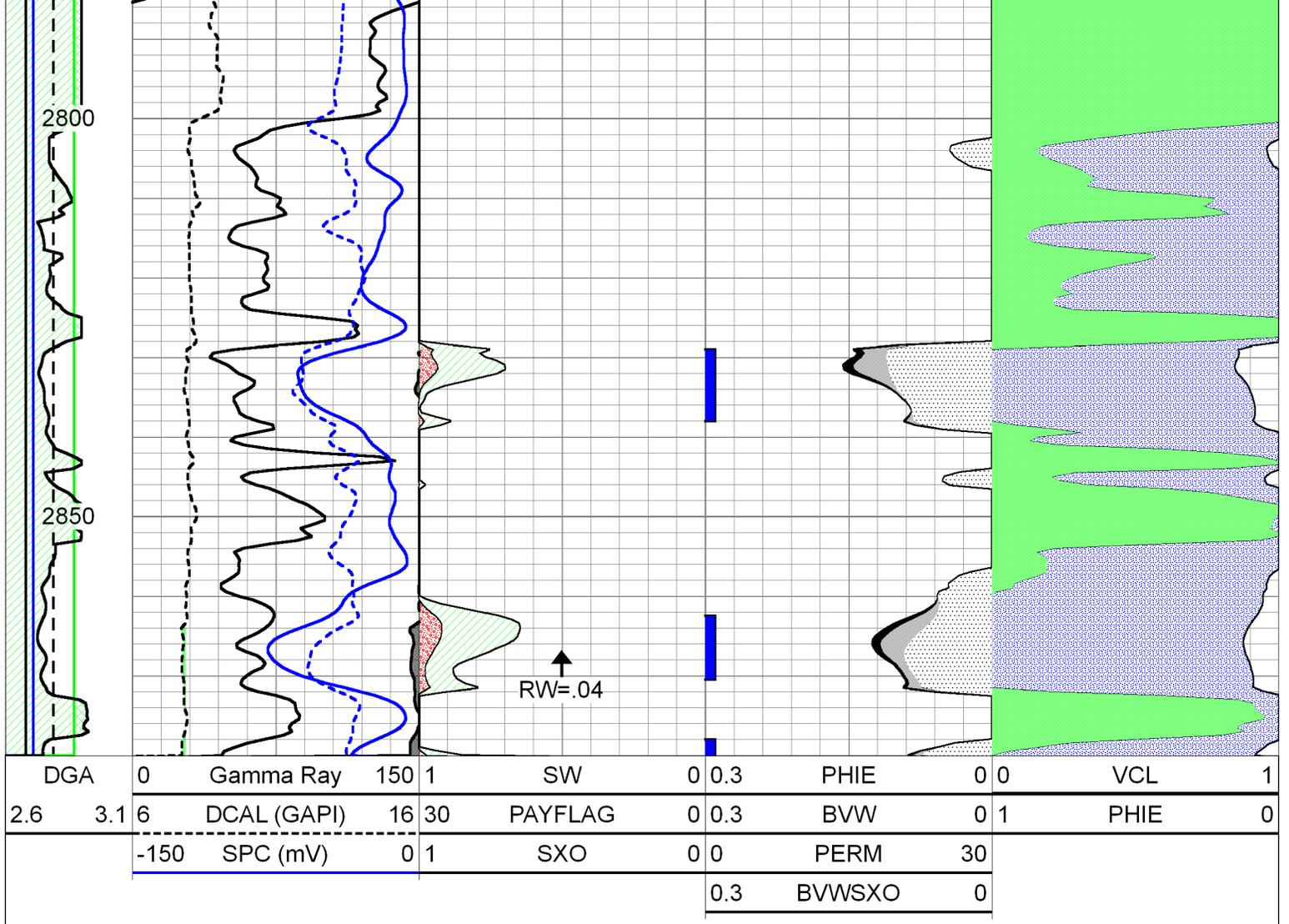












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