



**Computer Processed  
Interpretation**

**DIGITAL LOG (785) 625-3858**

15-179-21,279-00-00

API No.

Company **Dan Haffner**  
 Well **Haffner No. 2-20**  
 Field **Lombardy**  
 County **Sheridan** State **Kansas**

Location  
 NW SW NE  
 1,600' FNL & 2,190' FEL

Other Services  
 DIL/CNL/CDL  
 BHCS/MEL

Sec: **20** Twp: **9 S** Rge: **27 W**

Permanent Datum Ground Level Elevation **2744**  
 Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum  
 Drilling Measured From Kelly Bushing

Elevation  
 K.B. 2754  
 D.F. 2744  
 G.L. 2744

Date Recorded 4/18/2011

Depth Logger 4500

Curve Definitions

SW Water Saturation

SXO Water Saturation In The Flushed Zone

VCL Volume Of Clay

PHIE Density - Neutron Crossplot Shale Corrected

BVV 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 Jim Schuler

Witnessed By Bruce Ard

Analysis By Dale Legleiter

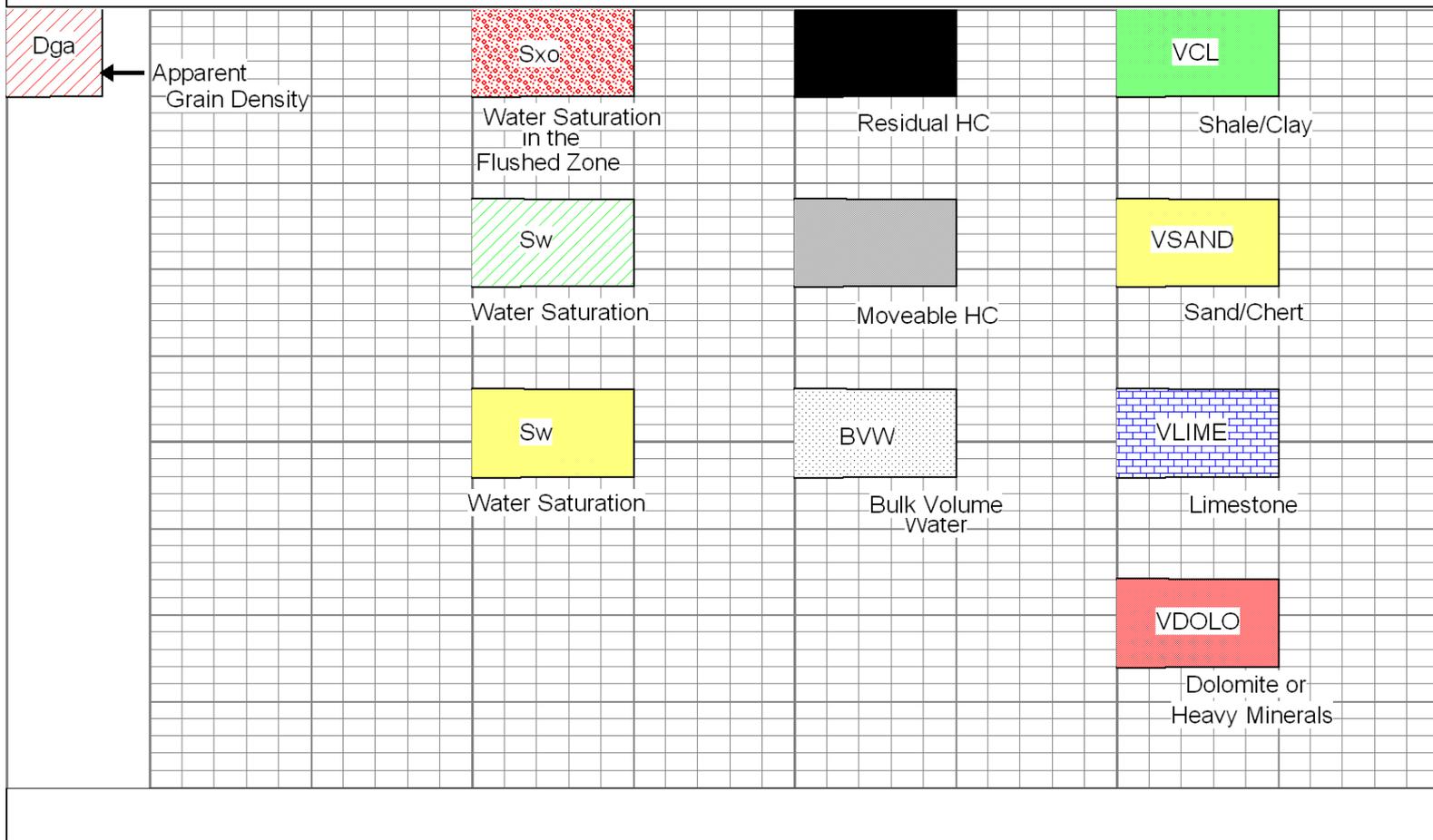
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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.

**Comments**

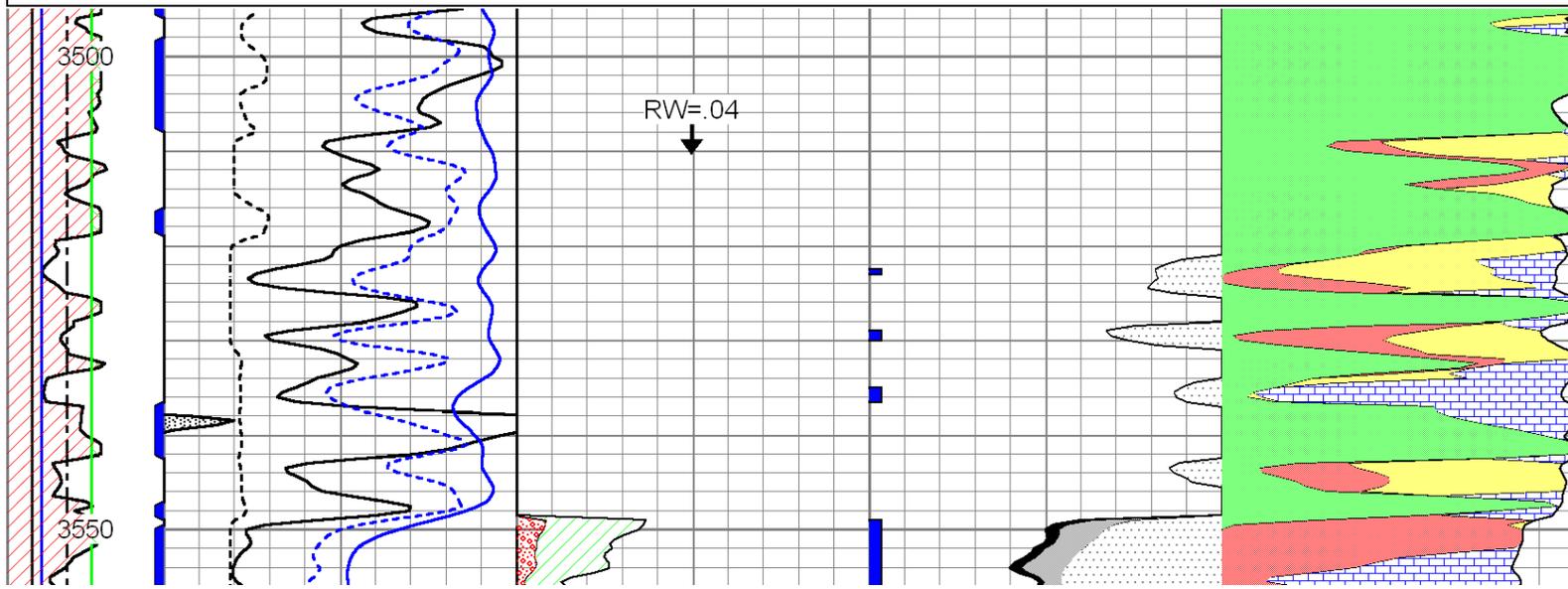
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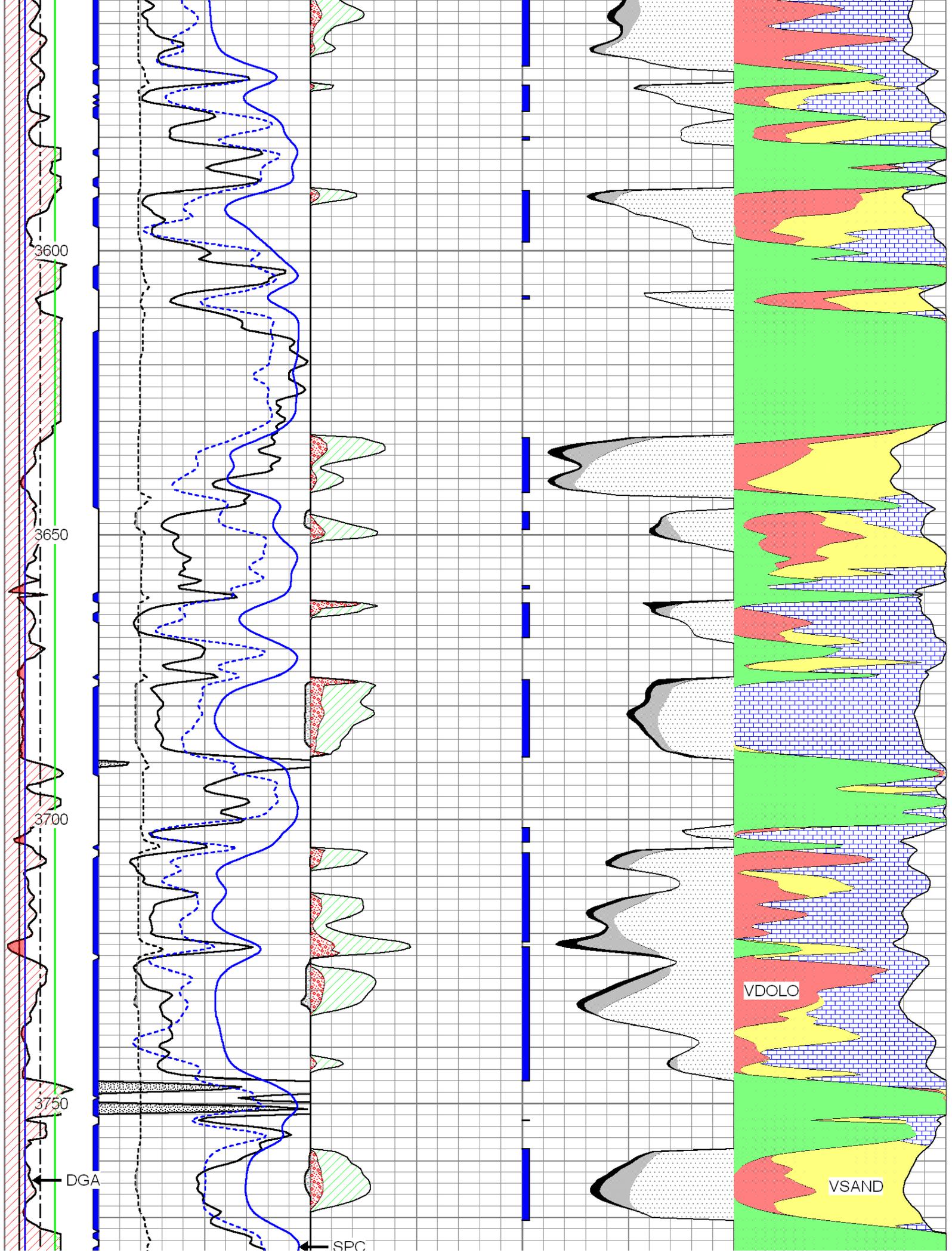
Park, Kansas, 10 Miles North to Road 70 S  
 East 1/2 Mile, South Into

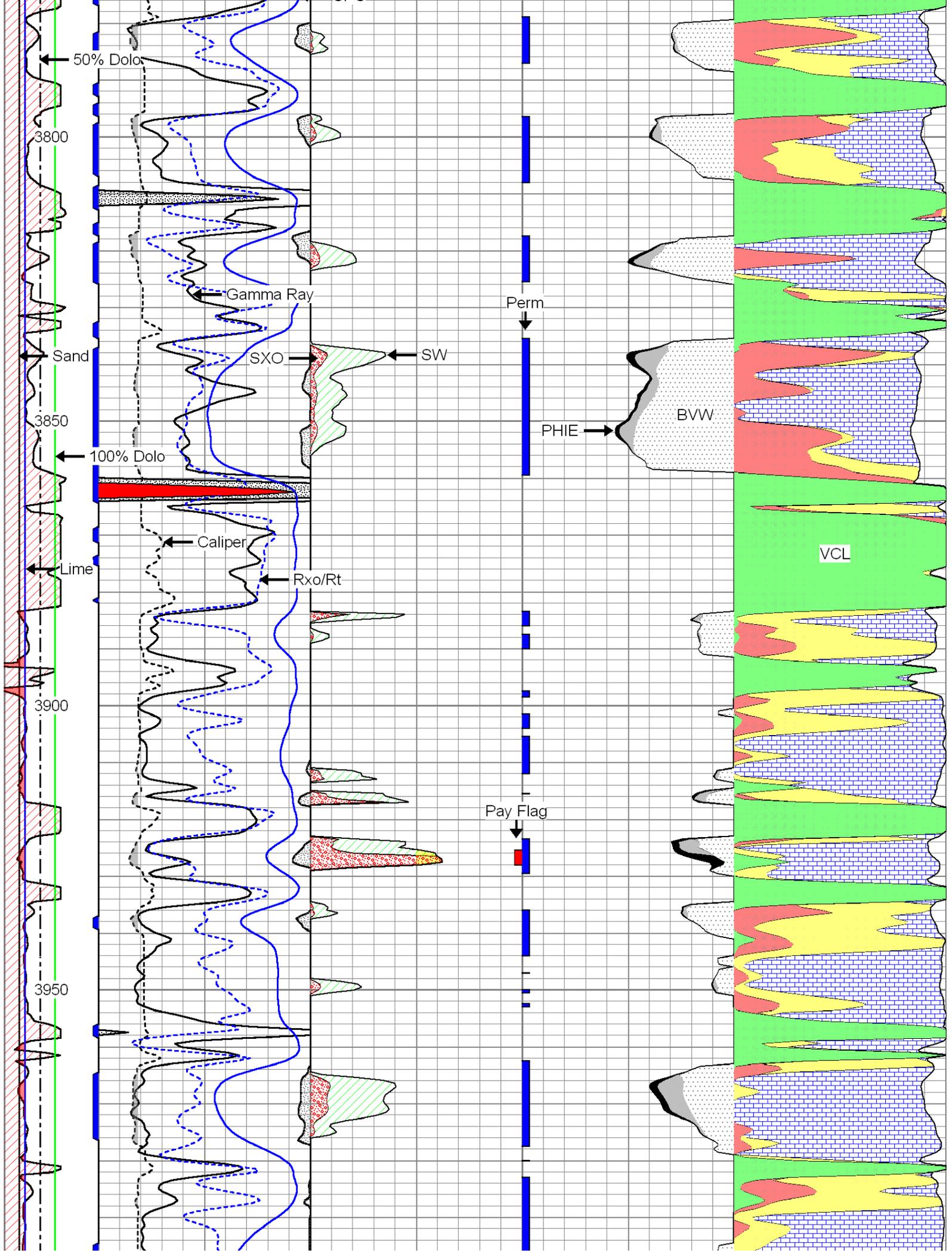


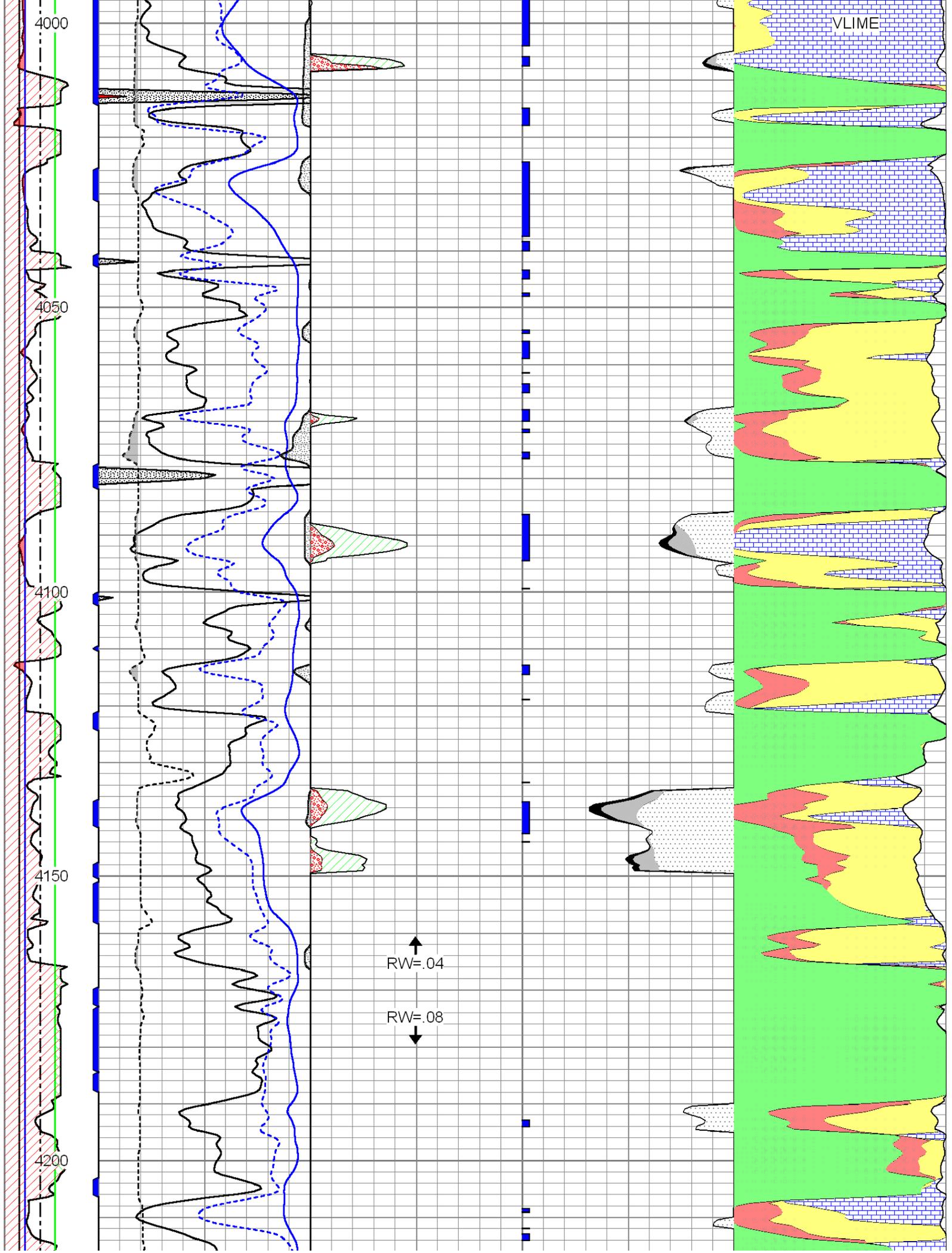
Database File: c:\warrior\data\dan haffner\_haffner no. 2-20\haffner\_haffner\_2\_20hd.db  
 Dataset Pathname: DIL/hafcpj  
 Presentation Format: aalitho  
 Dataset Creation: Mon Apr 18 13:51:04 2011  
 Charted by: Depth in Feet scaled 1:240

20	CLF	1	0	Gamma Ray	150	1	SW	0	0.3	PHIE	0	0	VCL	1
2.6	DGA	3.1	6	DCAL (GAPI)	16	30	PAYFLAG	0	0.3	BVW	0	0	VSAND	1
			-150	SPC (mV)	0	1	SXO	0	0	PERM	30	0	VLIME	1
								0.3		BVWSXO	0	0	VDOLO	1

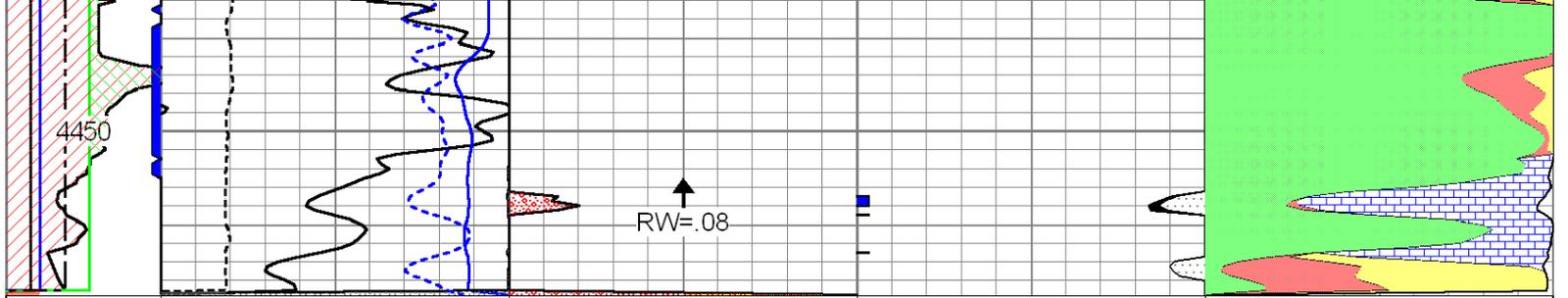












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