



Pioneer Energy Services

Computer Processed Interpretation

API No.	Company American Warrior, Inc.			
15-135-25402-00-00	Well	Wittman #11		
	Field	Schaben		
	County	Ness	State	Kansas
	Location	850' FSL & 1380' FWL		
Sec: 19		Twp: 19S	Rge: 21W	Other Services DIL/CNL/CDL
Permanent Datum	Ground Level	Elevation 2267		Elevation K.B. 2273
Log Measured From	Kelly Bushing	6	Ft. Above Perm. Datum	D.F. 2267
Drilling Measured From	Kelly Bushing			
Date Recorded	7/31/2012			
Depth Logger	4389			
	Curve Definitions			
SW	Water Saturation			
SXO	Water Saturation In The Flushed Zone			
VCL	Volume Of Clay			
PHIE	Density - Neutron Crossplot Shale Corrected			
BWV	Bulk Volume Water			
BWMSXO	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	D. Schmidt			
Witnessed By	Jason Alm			
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.

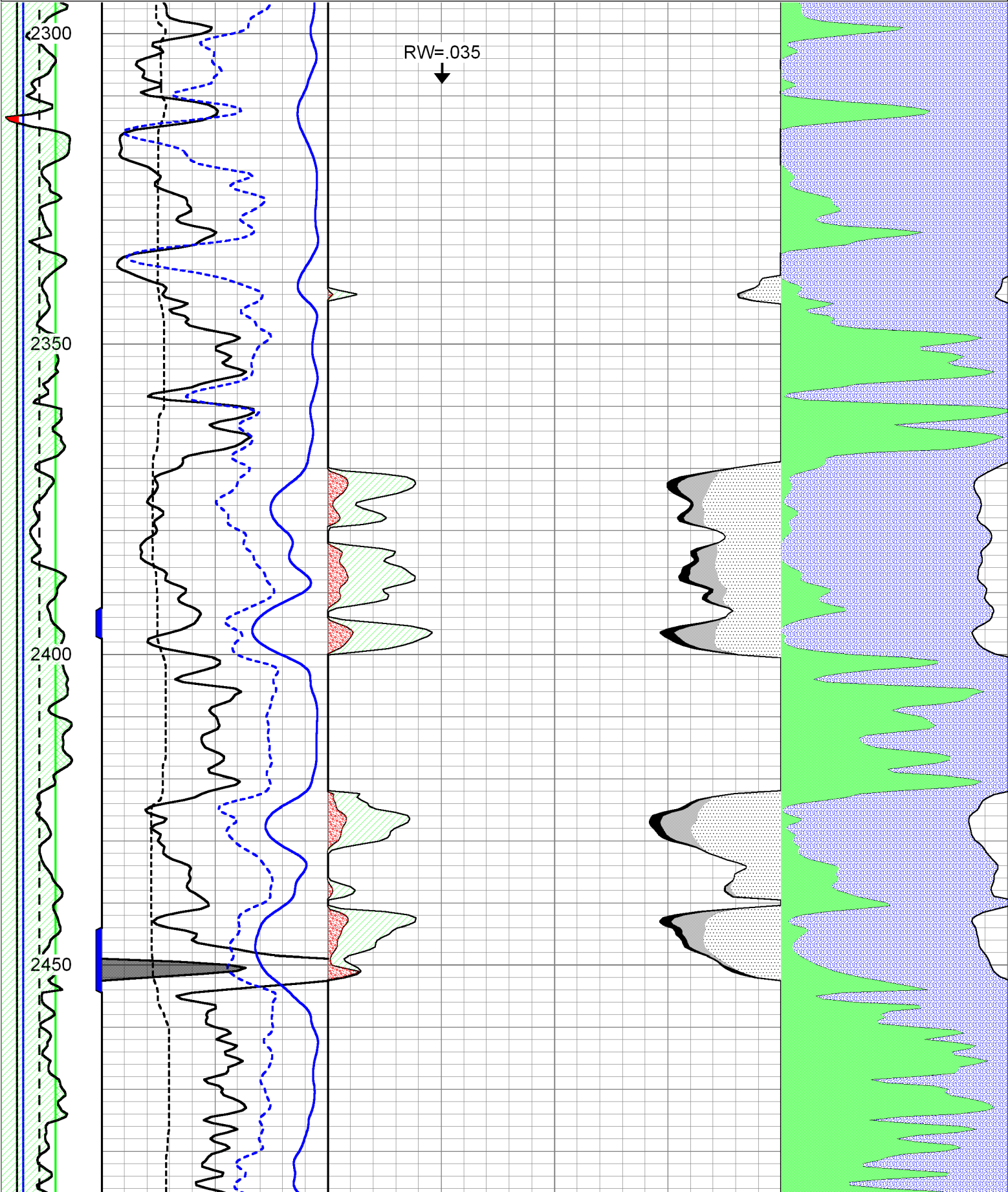
Comments

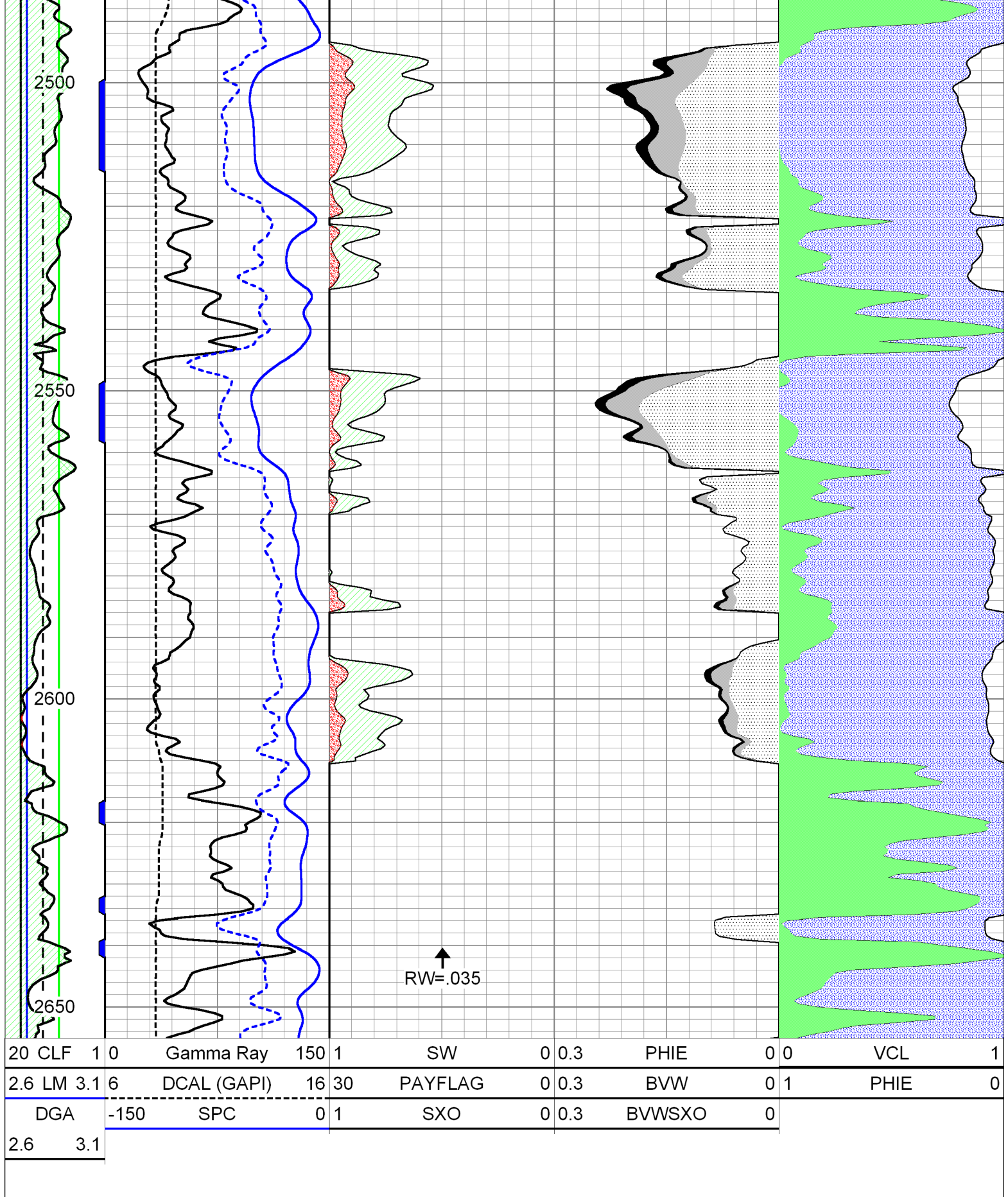
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Bazine (West Edge),
5 South to 80 Rd, 1/4 East,
North into

Database File: amwar_073112hd.db
Dataset Pathname: dil/awcpi
Presentation Format: calc
Dataset Creation: Tue Jul 31 10:58:09 2012
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	LM	3.1	6	DCAL (GAPI)	16	30	PAYFLAG	0	0.3	BVW	0	1	PHIE	0
	DGA		-150	SPC	0	1	SXO	0	0.3	BVWSXO	0			
2.6	3.1													





RW=.035

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