



Weatherford

**COMPENSATED NEUTRON
ACOUSTIC POROSITY OVERLAY**

COMPANY				REDLAND RESOURCES, INC.			
WELL				EMILY #30-5			
FIELD				GRAY HAWK NW			
PROVINCE/COUNTY				HODGEMAN			
COUNTRY/STATE				U.S.A. / KANSAS			
LOCATION				1659' FNL & 165' FWL NW/4			
SEC	TWP	RGE	Other Services				
30	23S	24W	MAI/MFE				
API Number		15-083-21877					
Permit Number							
Permanent Datum G.L., Elevation 2504 feet							
Log Measured From KB							
Drilling Measured From K.B.							
Date	14-FEB-2013			Elevations:			
Run Number	ONE			KB	2512.00		
Service Order	3537865			DF	2510.00		
Depth Driller	4900.00			feet	2504.00		
Depth Logger	4900.00			feet			
First Reading	4887.00			feet			
Last Reading	3975.00			feet			
Casing Driller	222.00			feet			
Casing Logger	221.00			inches			
Bit Size	7.875						
Hole Fluid Type	CHEMICAL			lb/USg			
Density / Viscosity	9.60 lb/USg		47.00 CP				
PH / Fluid Loss	10.00		10.00				
Sample Source	FLOWLINE						
Rm @ Measured Temp	1.32 @ 81.0		ohm-m				
Rmf @ Measured Temp	1.06 @ 81.0		ohm-m				
Rmc @ Measured Temp	1.58 @ 81.0		ohm-m				
Source Rmf / Rmc	CALC		CALC				
Rm @ BHT	1.0 @ 107.0		ohm-m				
Time Since Circulation	4 HOURS						
Max Recorded Temp	107.00		deg F				
Equipment / Base	13057		LIB				
Recorded By	R. HOFFMAN						
Witnessed By	BETH BROCK						
JOB #	LB13-45						

BOREHOLE RECORD

Last Edited: 14-FEB-2013 02:31

Bit Size inches	Depth From feet	Depth To feet
7.875	221.00	4900.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	0.00	221.00	24.00

REMARKS

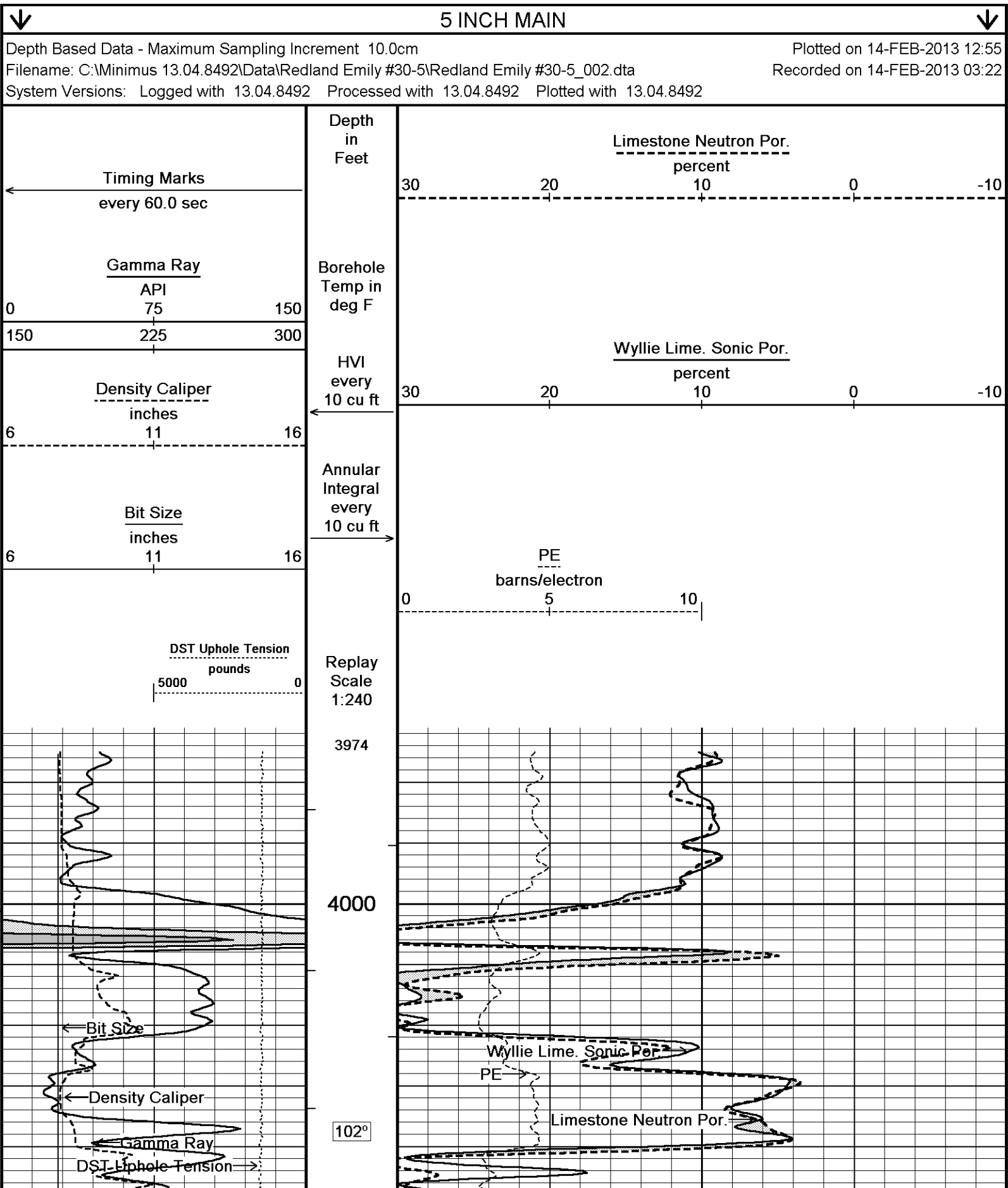
Tools Used: MCG, MML, MDN, MPD, MFE, MSS, MAI ran in combination.
Hardware: MPD: 8 inch profile plate used. MAI, MSS, MFE: 0.5 Inch standoffs used. MDN: Dual Bowspring used.
2.71 G/CC Limestone density matrix used to calculate porosity.
Sonic porosity calculated using a Limestone scale (47.5 usec/ft).
Borehole rugosity, tight pulls, and washouts will affect data quality.
All intervals logged and scaled per customer's request.
Total hole volume from TD to Surface casing= 2185 cubic feet
Annular volume with 4.5 inch production casing TD to 3950ft = 262 cubic feet
Service order #353865
Rig: Duke Drilling Rig #8
Engineer: R. Hoffman
Operator(s): K. Rinehart

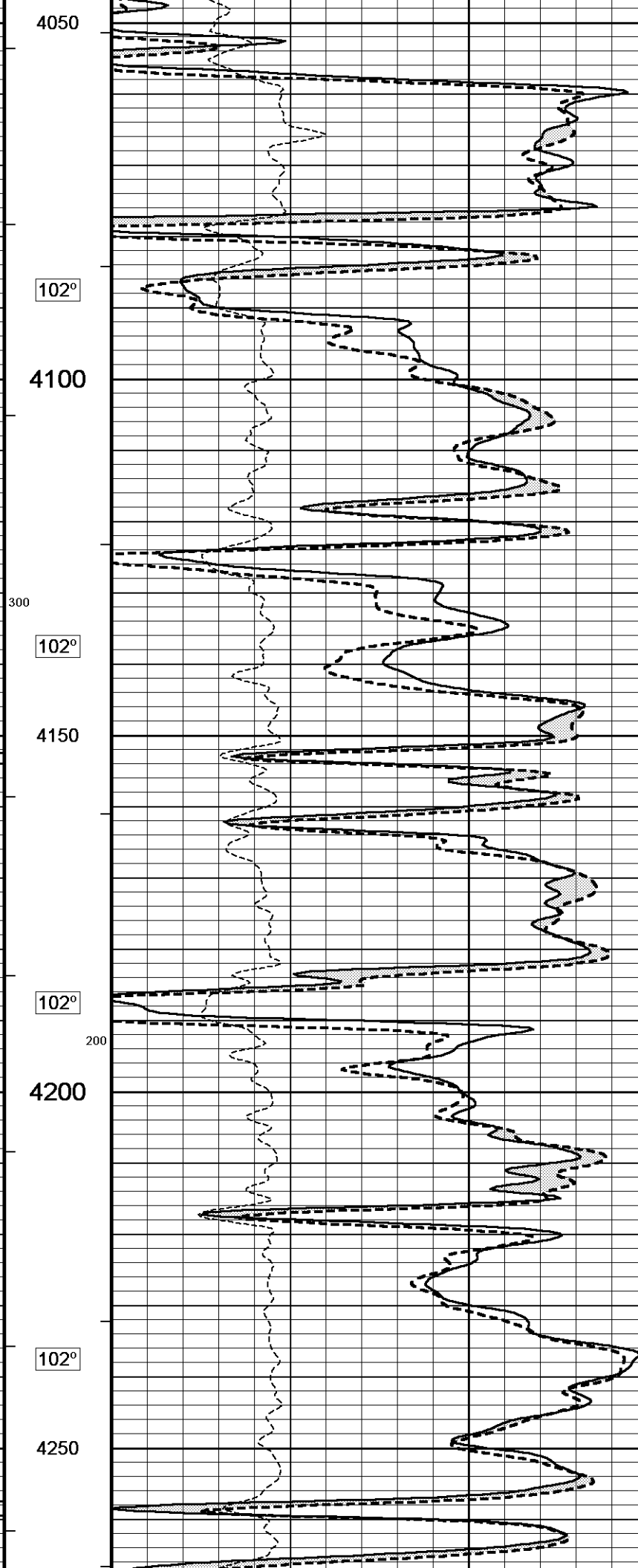
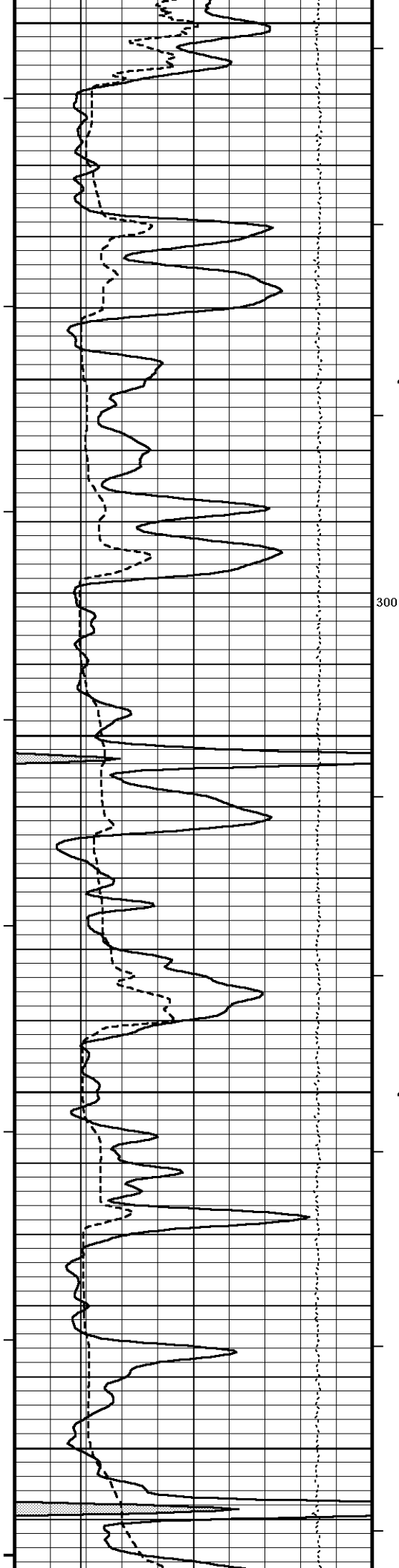
No microlog data presented due to tool failure. Customer said to continue logging out.

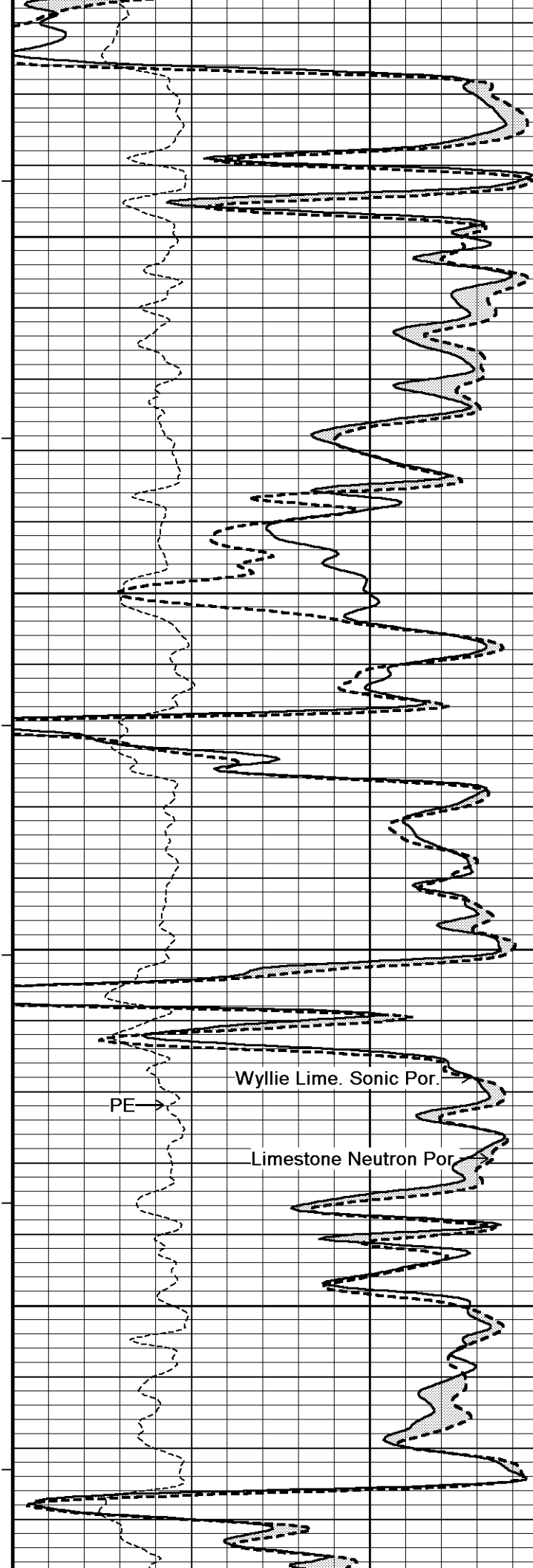
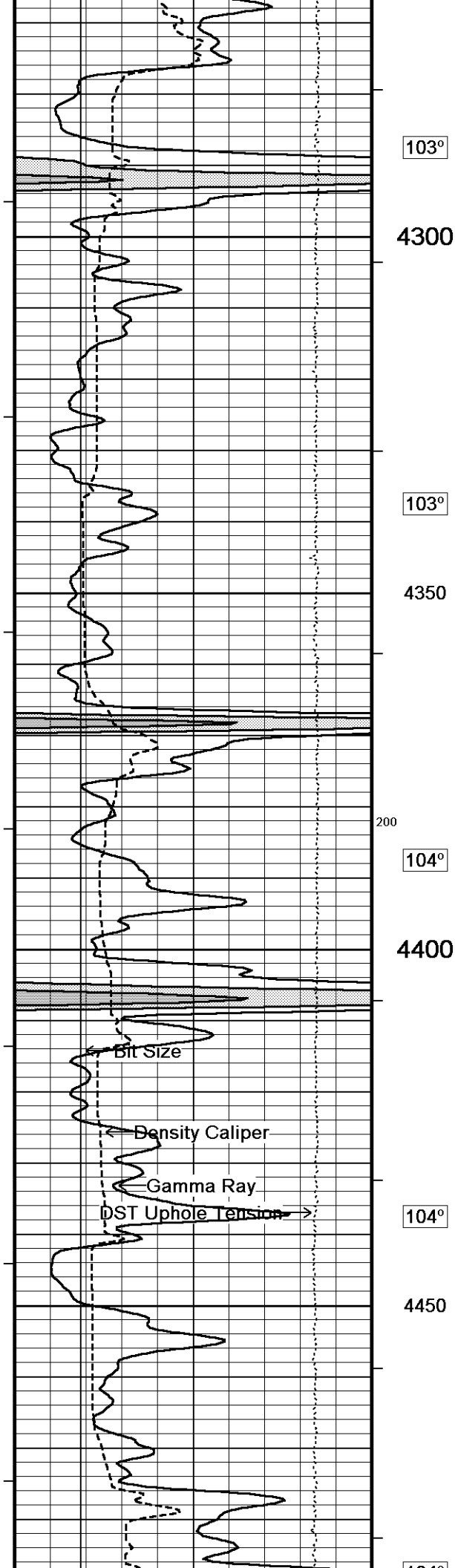
Software duplicates the pH value onto the fluid loss. The fluid loss is 8.0 ml/30Min.

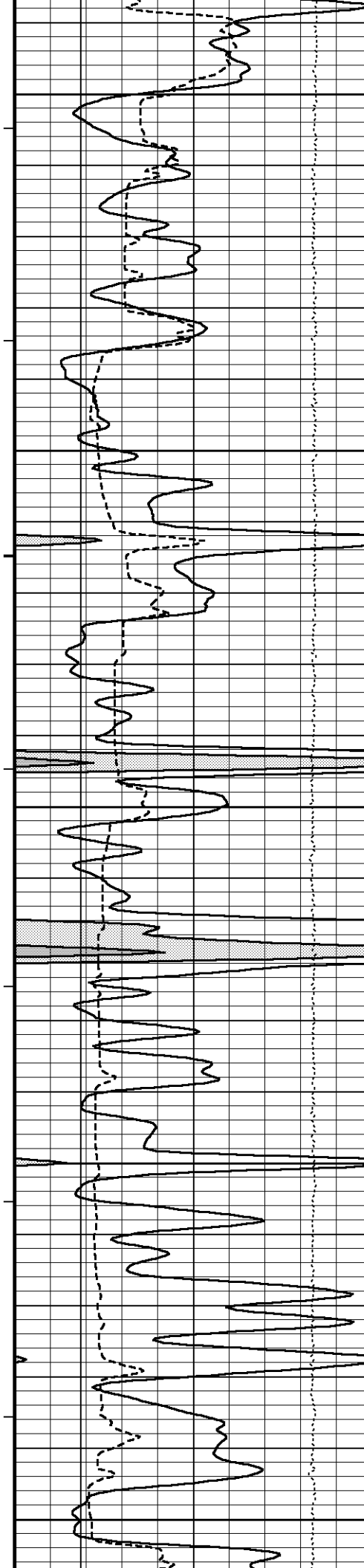
Overlay presentation of the Neutron - Sonic Porosity presented on a limestone matrix

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 interpretations, and we shall not, except in the case of gross or wilful 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 in our price schedule.









104°

4500

100

104°

4550

105°

4600

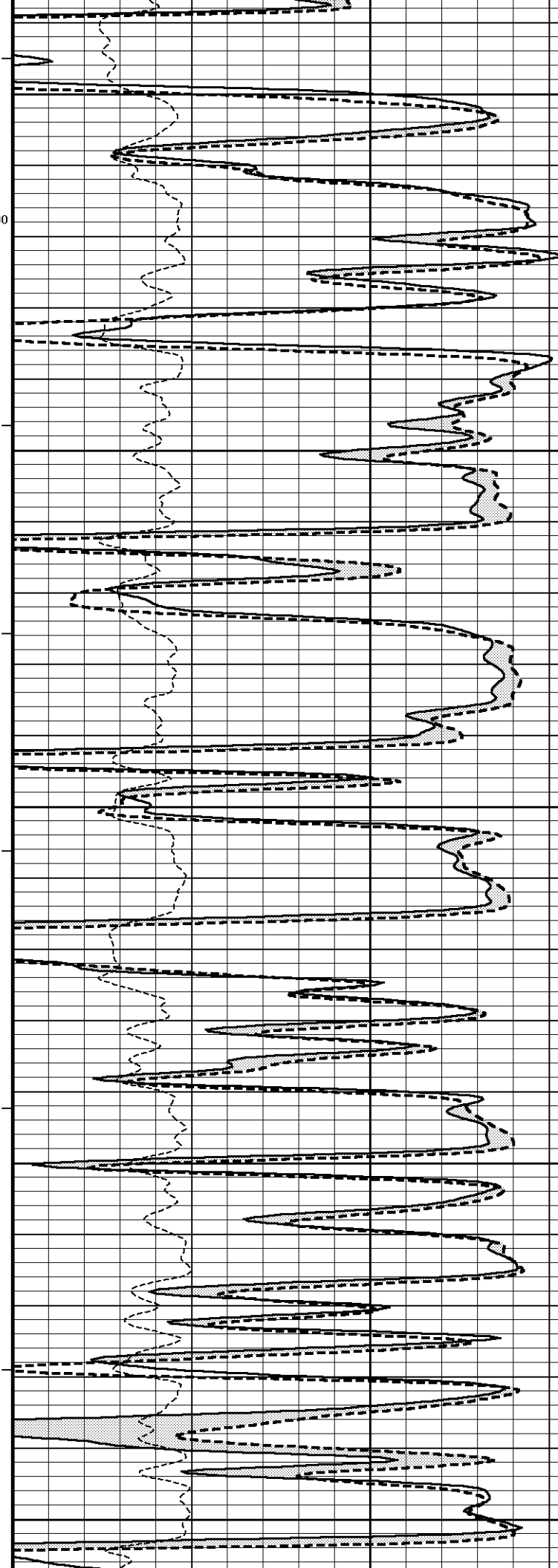
100

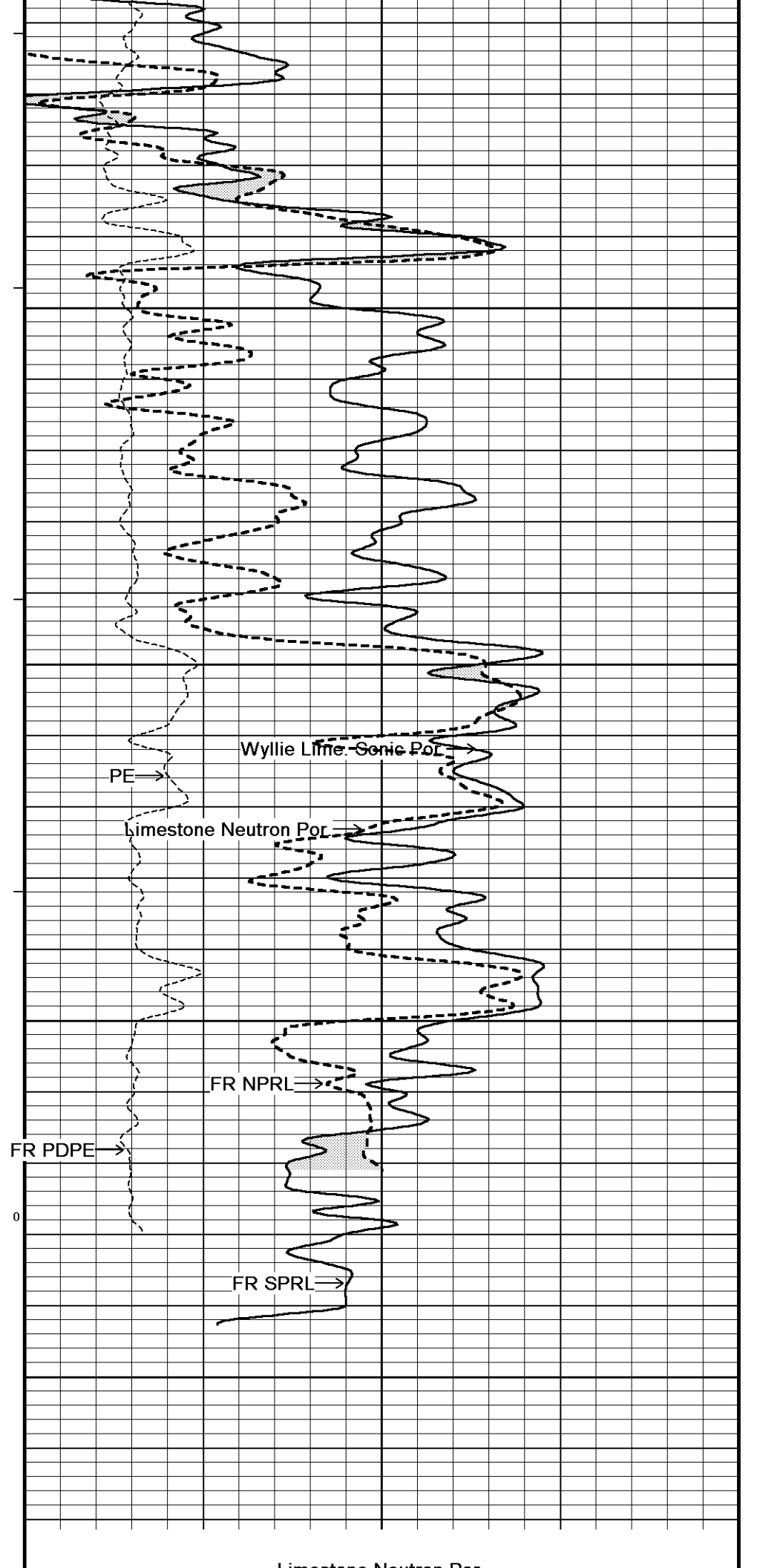
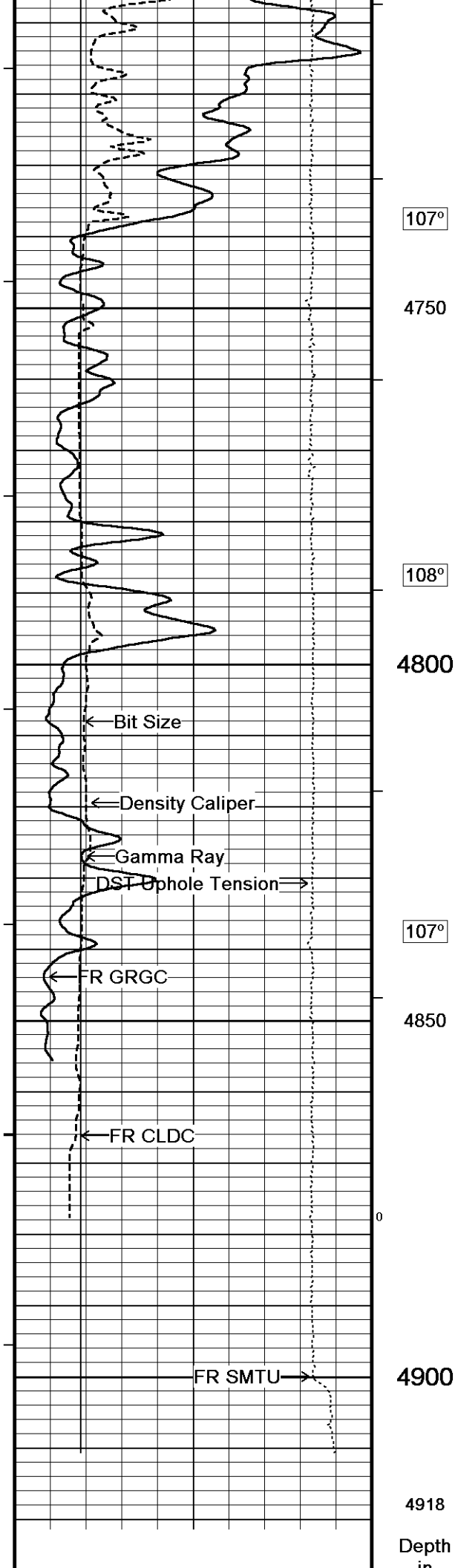
105°

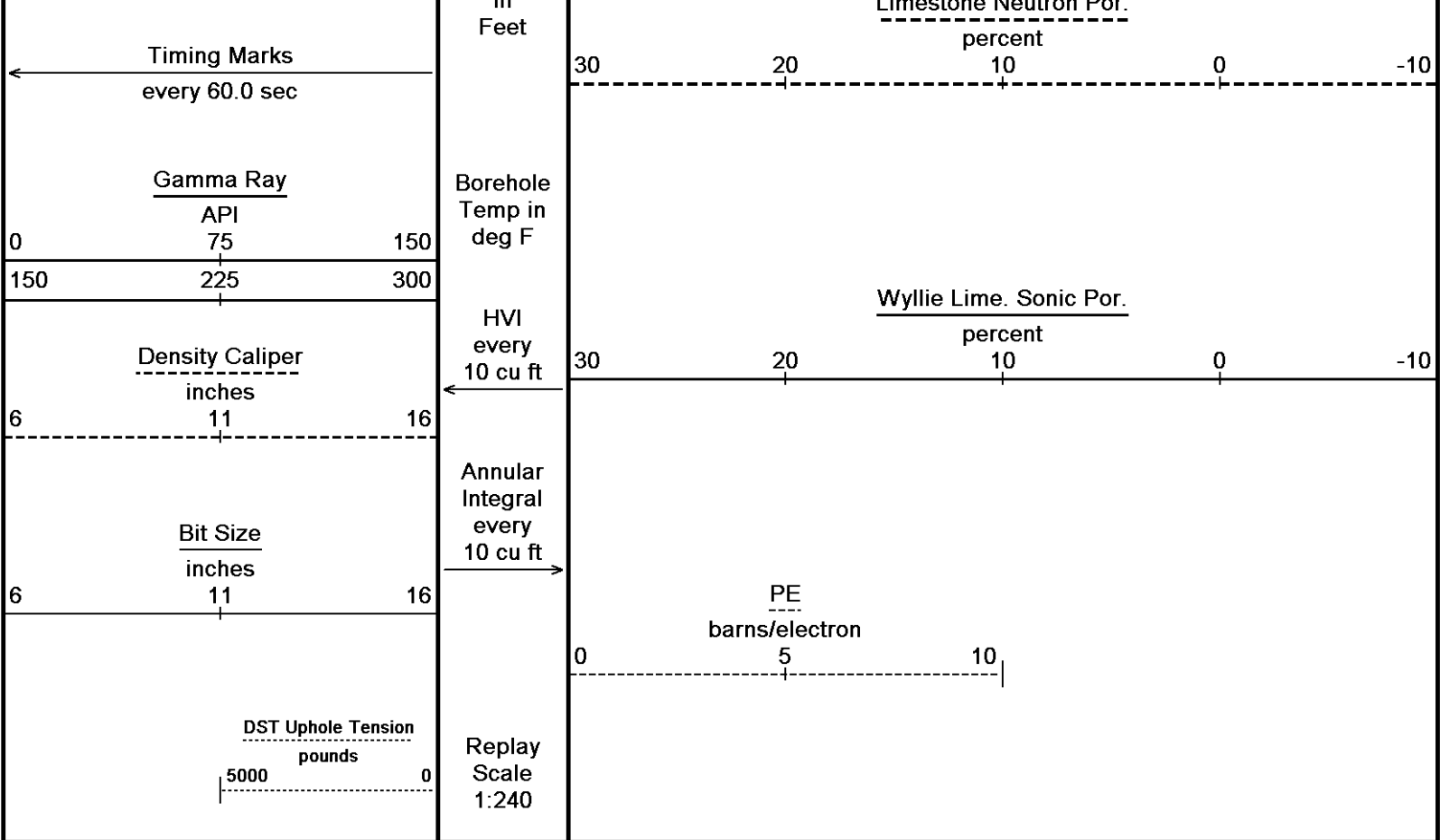
4650

106°

4700







Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 14-FEB-2013 12:56
 Filename: C:\Minimus 13.04.8492\Data\Redland Emily #30-5\Redland Emily #30-5_002.dta Recorded on 14-FEB-2013 03:22
 System Versions: Logged with 13.04.8492 Processed with 13.04.8492 Plotted with 13.04.8492

↑ 5 INCH MAIN ↑

COMPANY	REDLAND RESOURCES, INC.				
WELL	EMILY #30-5				
FIELD	GRAY HAWK NW				
PROVINCE/COUNTY	HODGEMAN				
COUNTRY/STATE	U.S.A. / KANSAS				
Elevation Kelly Bushing	2512.00	feet	First Reading		feet
Elevation Drill Floor	2510.00	feet	Depth Driller	4900.00	feet
Elevation Ground Level	2504.00	feet	Depth Logger	4900.00	feet



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