



Pioneer Energy Services

Dual Compensated Porosity Log

Company Larson Engineering, Inc.
Well Joe No. 1 - 21
Field Wildcat
County Lane
State Kansas
Location SE - SE - SW - NW
 2454' FNL & 1285' FWL
Sec: 21 **Twp:** 17 S **Rge:** 30 W

Other Services
 DIL
 MEL
Elevation
 K.B. 2880
 D.F. G.L. 2873

API No. 15-101-22,395-00-00
Permanent Datum Ground Level Elevation 2873
Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	8/18/2012
Run Number	One
Type Log	CNL / CDL
Depth Driller	4630
Depth Logger	4630
Bottom Logged Interval	4610
Top Logged Interval	3600
Type Fluid In Hole	Chemical
Salinity, PPM CL	1600
Density	9.1
Level	Full
Max. Rec. Temp. F	122
Operating Rig Time	41/2 Hours
Equipment -- Location	17 Hays
Recorded By	D. Martin
Witnessed By	Bob Lewellyn

Borehole Record		Casing Record					
Run No	Bit From	To	Size	Wgt.	24#	From	To
One	12.25	0	261	8.625	24#	0	261
Two	7.875	261	TD				

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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

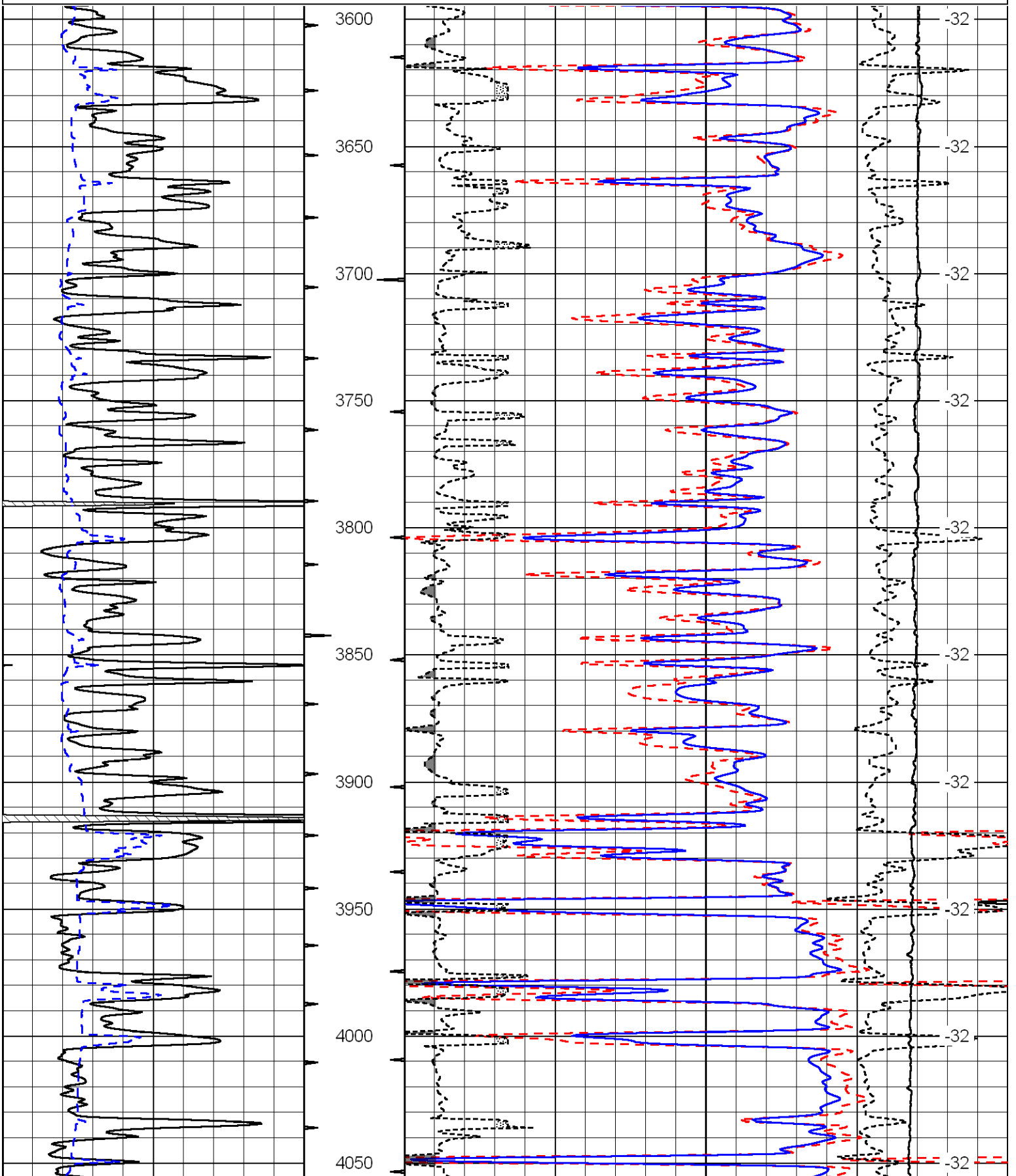
Thank you for using Pioneer Energy Services
www.pioneer.com
 785 625 3858
 Healy, KS
 2 W to Bison Rd., 2 1/2 S,
 E Into

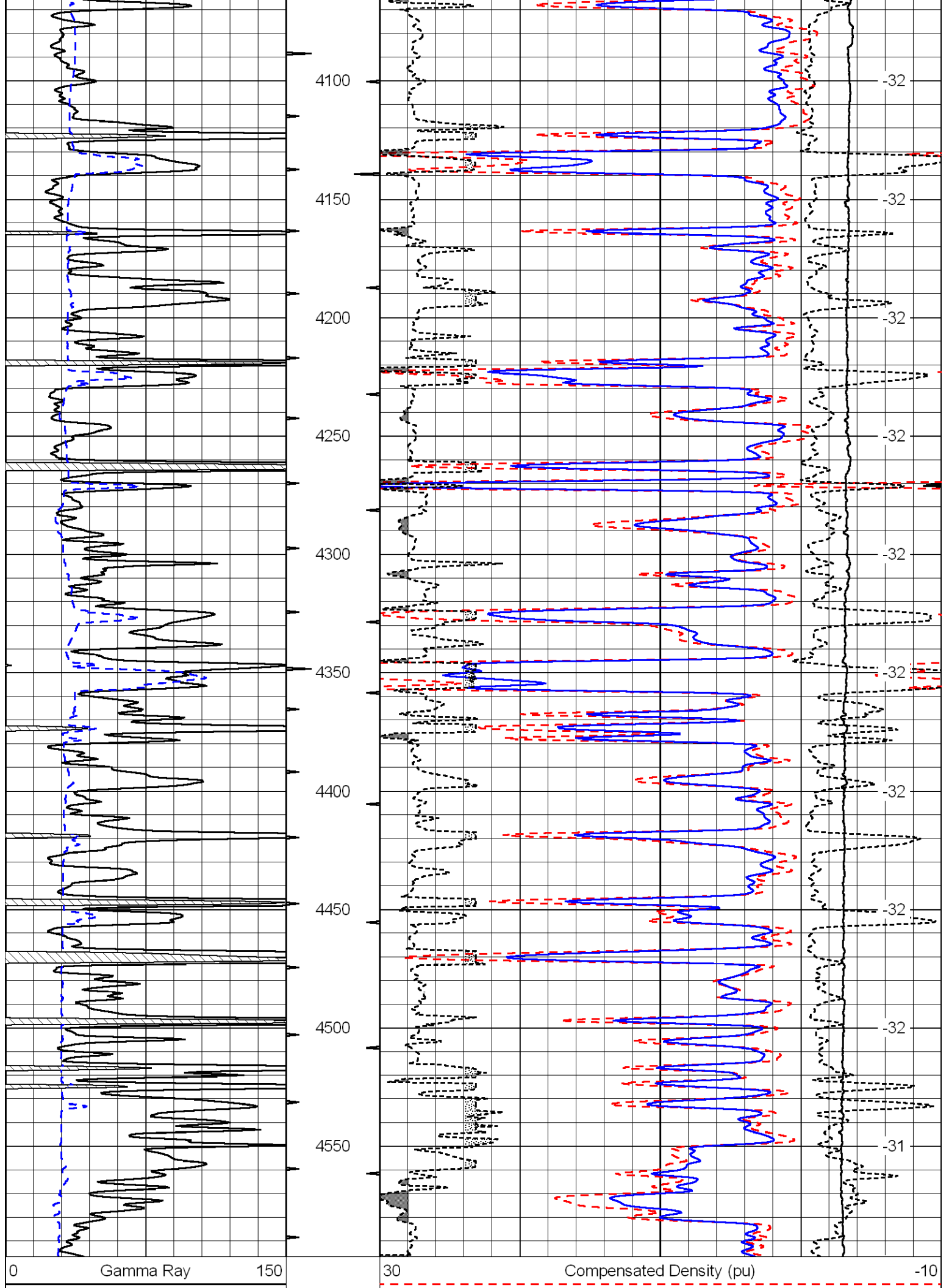
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Dataset Pathname:	DIL/larstk
Presentation Format:	cdl
Dataset Creation:	Sat Aug 18 06:28:04 2012
Charted by:	Depth in Feet scaled 1:600

0	Gamma Ray	150
6	Caliper (GAPI)	16

30	Compensated Density (pu)			-10	
2	Bulk Density (g/cc)			3	
15000	Line Tension (lb)			0	
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25

LSPD
(ft/min)





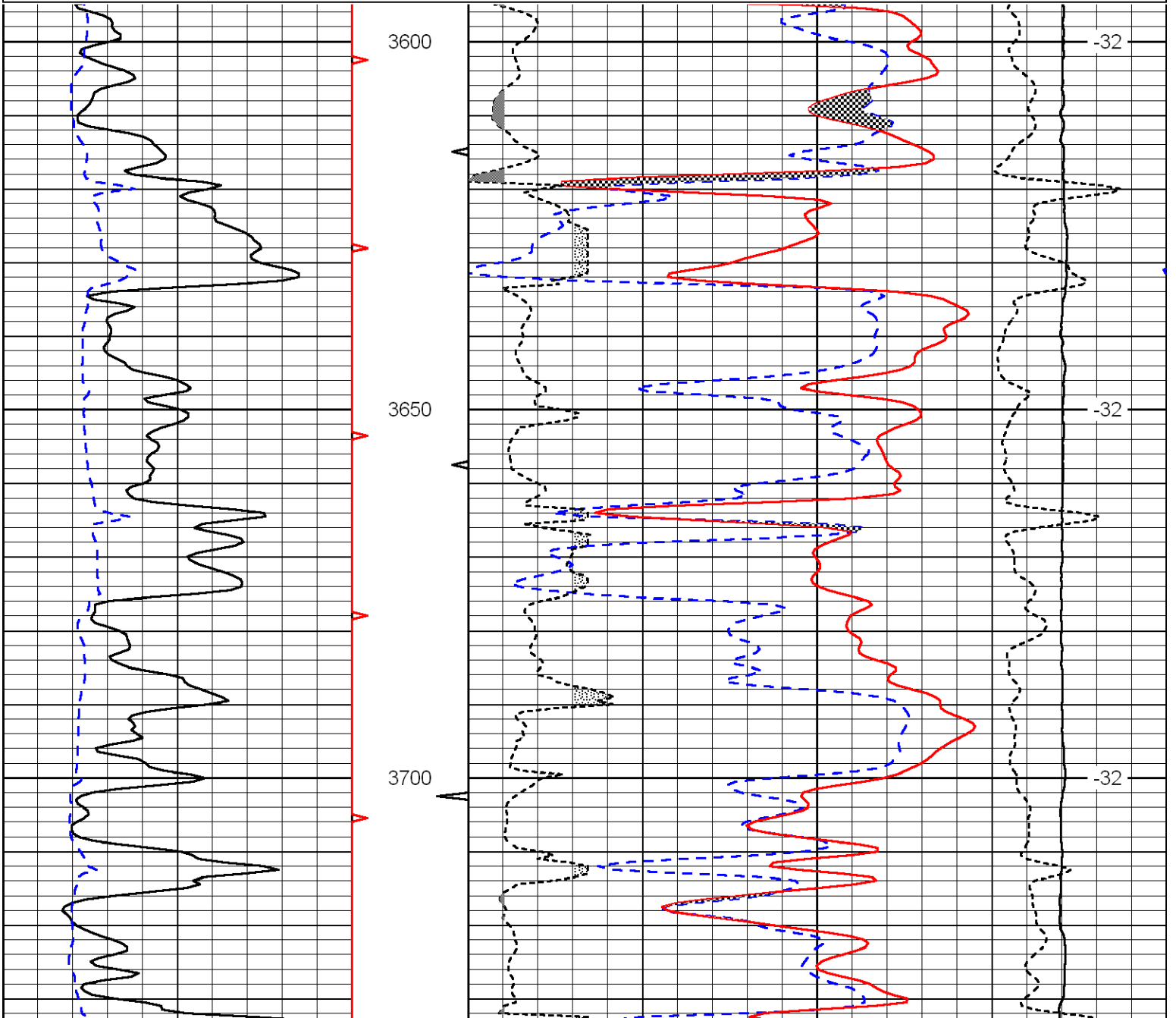
6	Caliper (GAPI)	16
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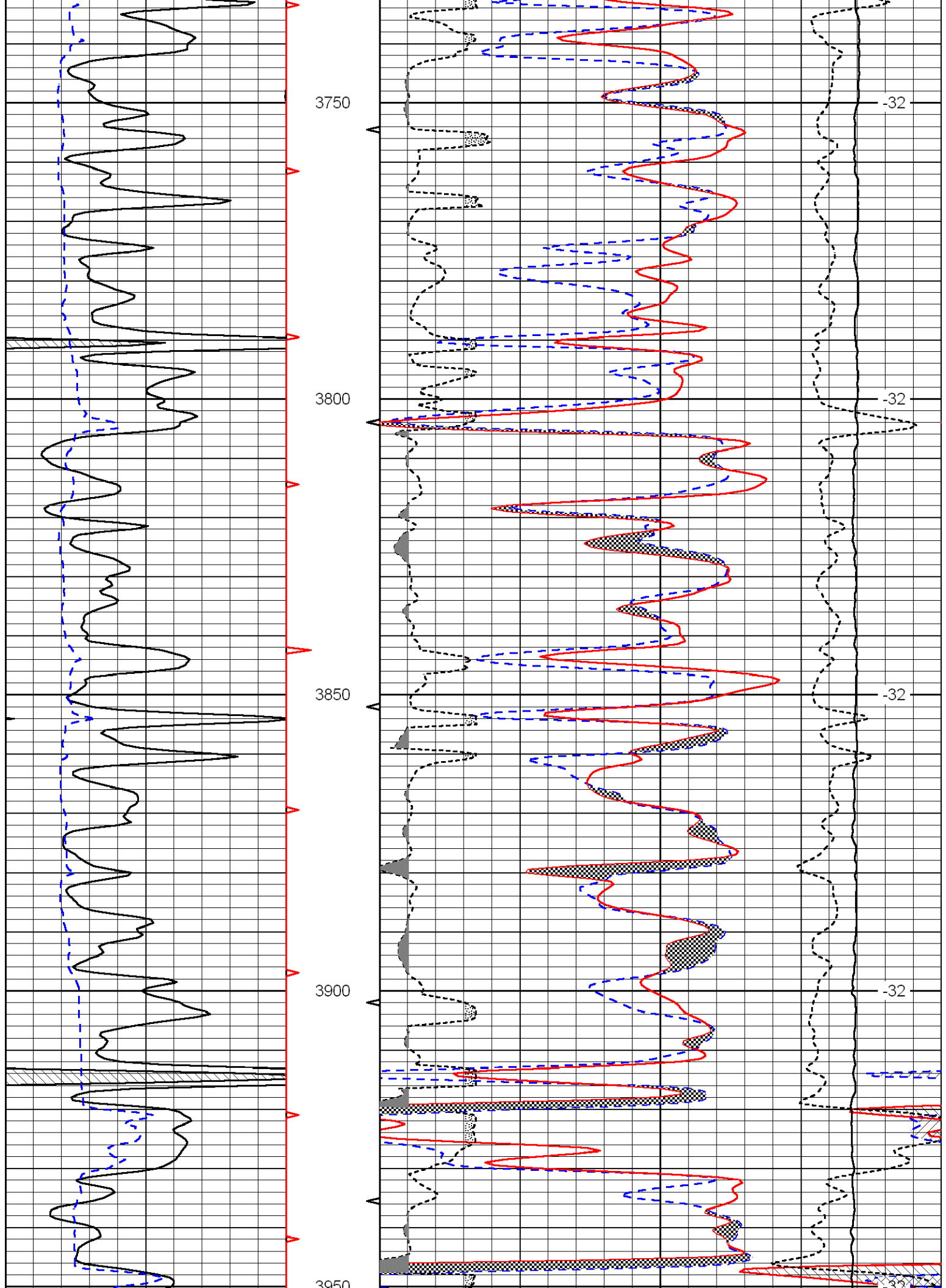
2	Bulk Density (g/cc)			3	
15000	Line Tension (lb)			0	
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
				LSPD (ft/min)	

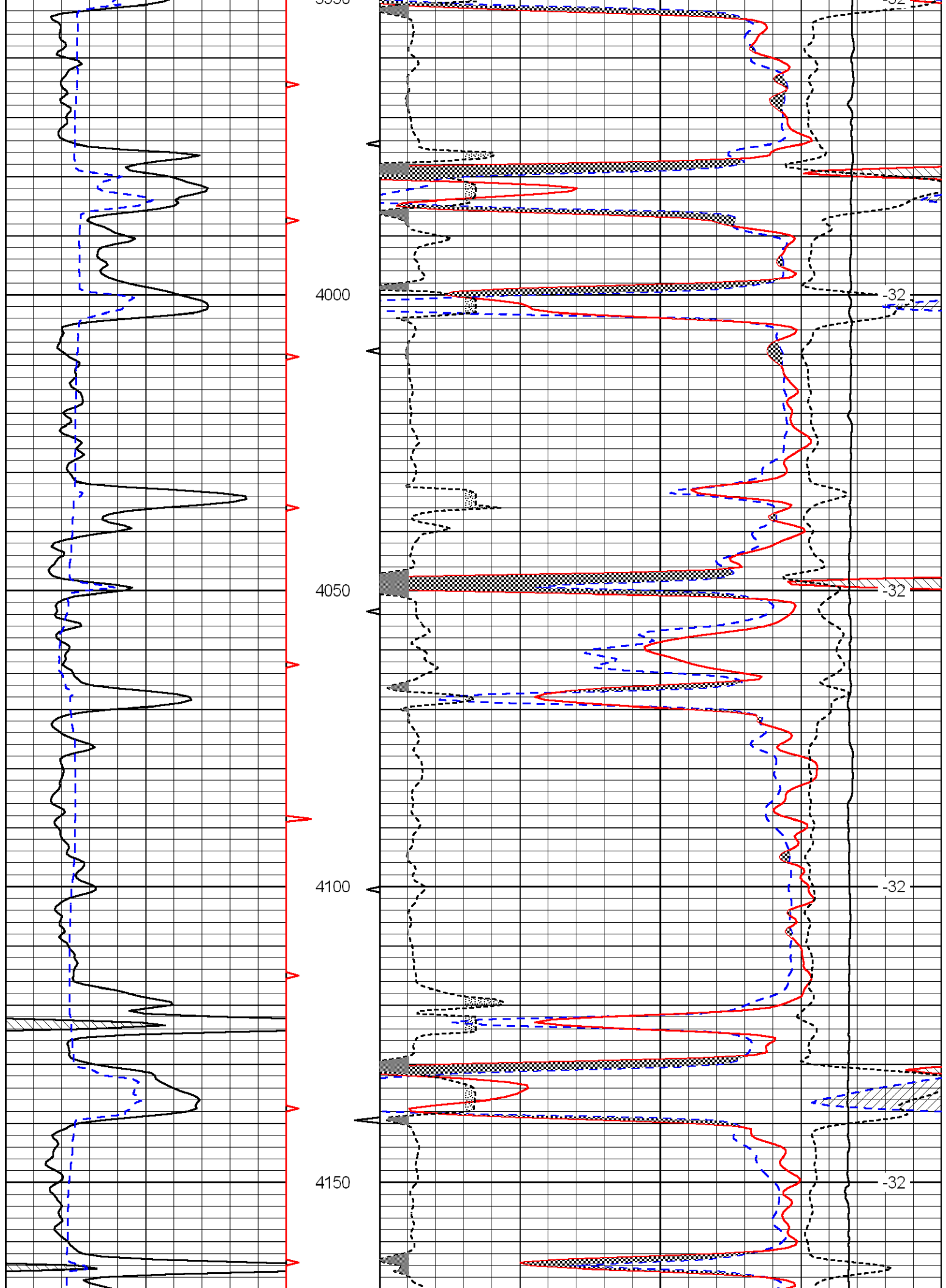
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 Dataset Creation: Sat Aug 18 06:28:04 2012
 Charted by: Depth in Feet scaled 1:240

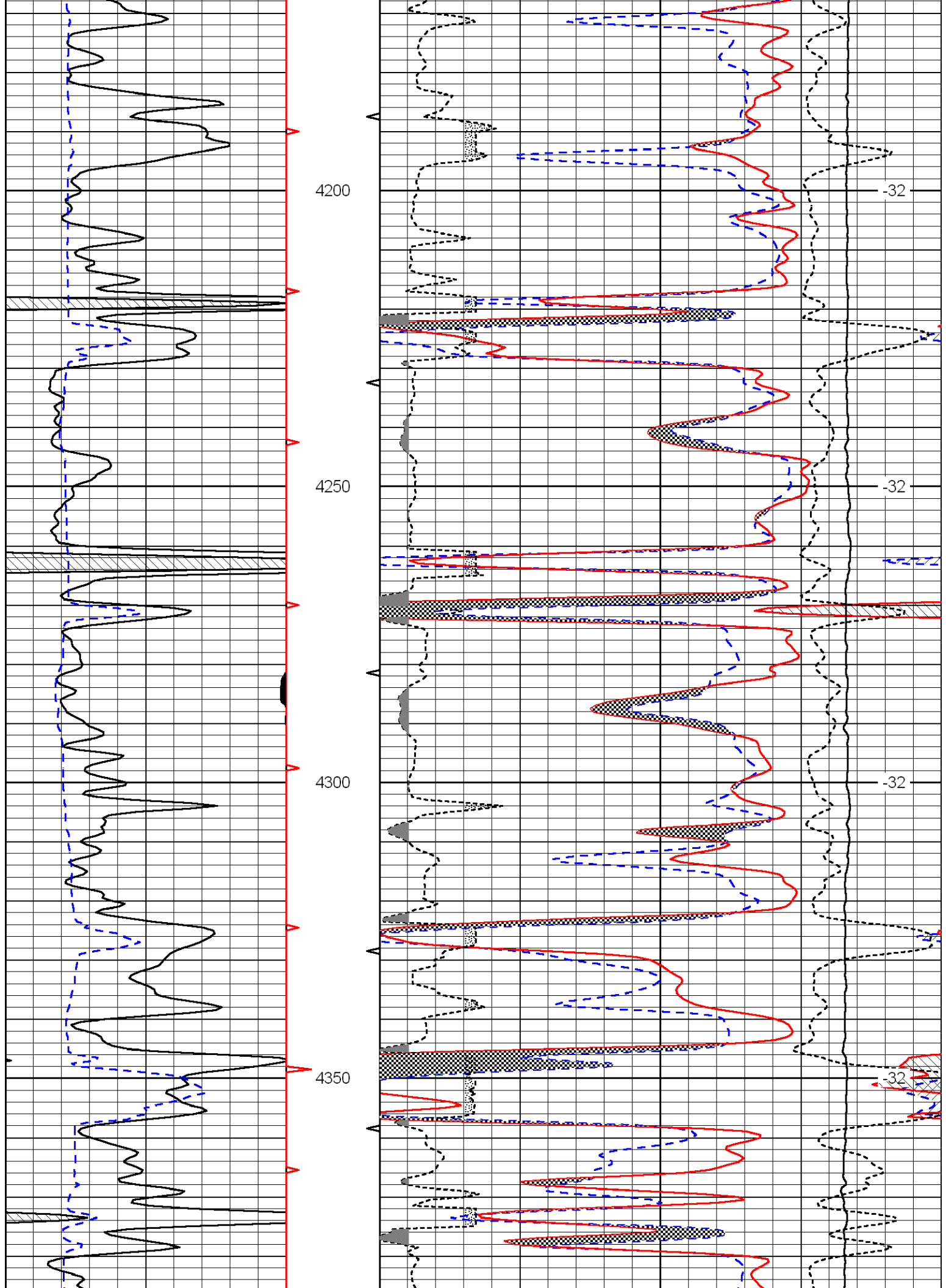
0	Gamma Ray	150
6	Caliper (GAPI)	16

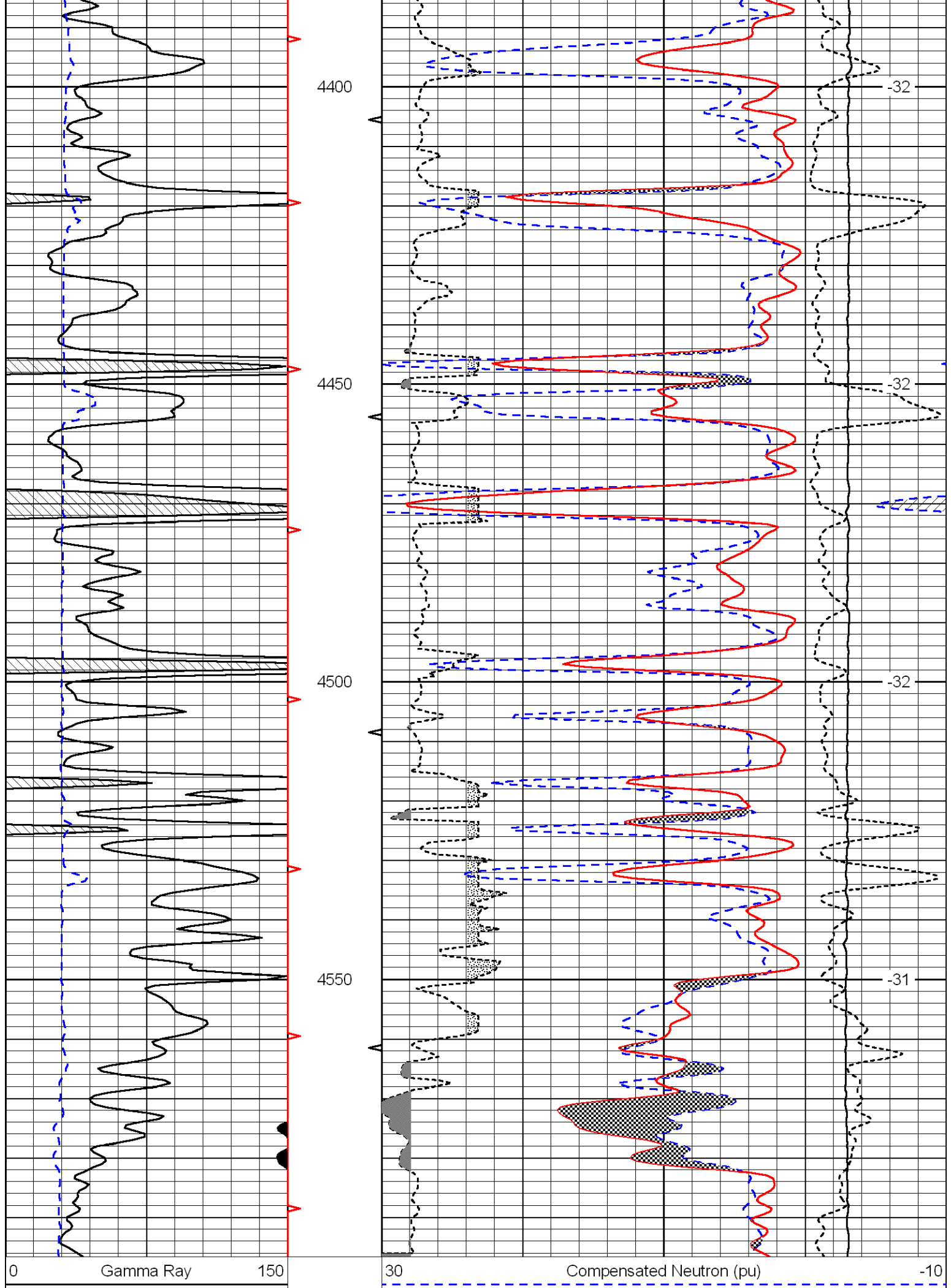
30	Compensated Neutron (pu)			-10	
30	Compensated Density (2.71 ma) (pu)			-10	
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
15000	Line Tension (lb)			0	
				LSPD (ft/min)	











6 Caliper (GAPI) 16

30	Compensated Density (2.71 ma) (pu)		-10		
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
15000	Line Tension (lb)				0
					LSPD
					(ft/min)