



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-053-21,305-00-00

Company American Warrior, Inc.

Well D&S No. 1-5

Field Stollenberg

County Ellsworth State Kansas

Location

NE NW SW SW
1,100' FSL & 500' FWL

Other Services
DIL/MEI

Sec: 5 Twp: 16S Rge: 10W

Permanent Datum Ground Level Elevation 1811
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date 2/3/2014

Run Number One

Type Log CNL / CDL

Depth Driller 3410

Depth Logger 3412

Bottom Logged Interval 3391

Top Logged Interval 2650

Type Fluid In Hole Chemical

Salinity, PPM CL 4800

Density 9.4

Level Full

Max. Rec. Temp. F 110

Operating Rig Time 4 Hours

Equipment -- Location 108 Hays

Recorded By J. Long

Witnessed By Wyatt Urban

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	386	8.625	23#	00	386
Two	7.875	386	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.

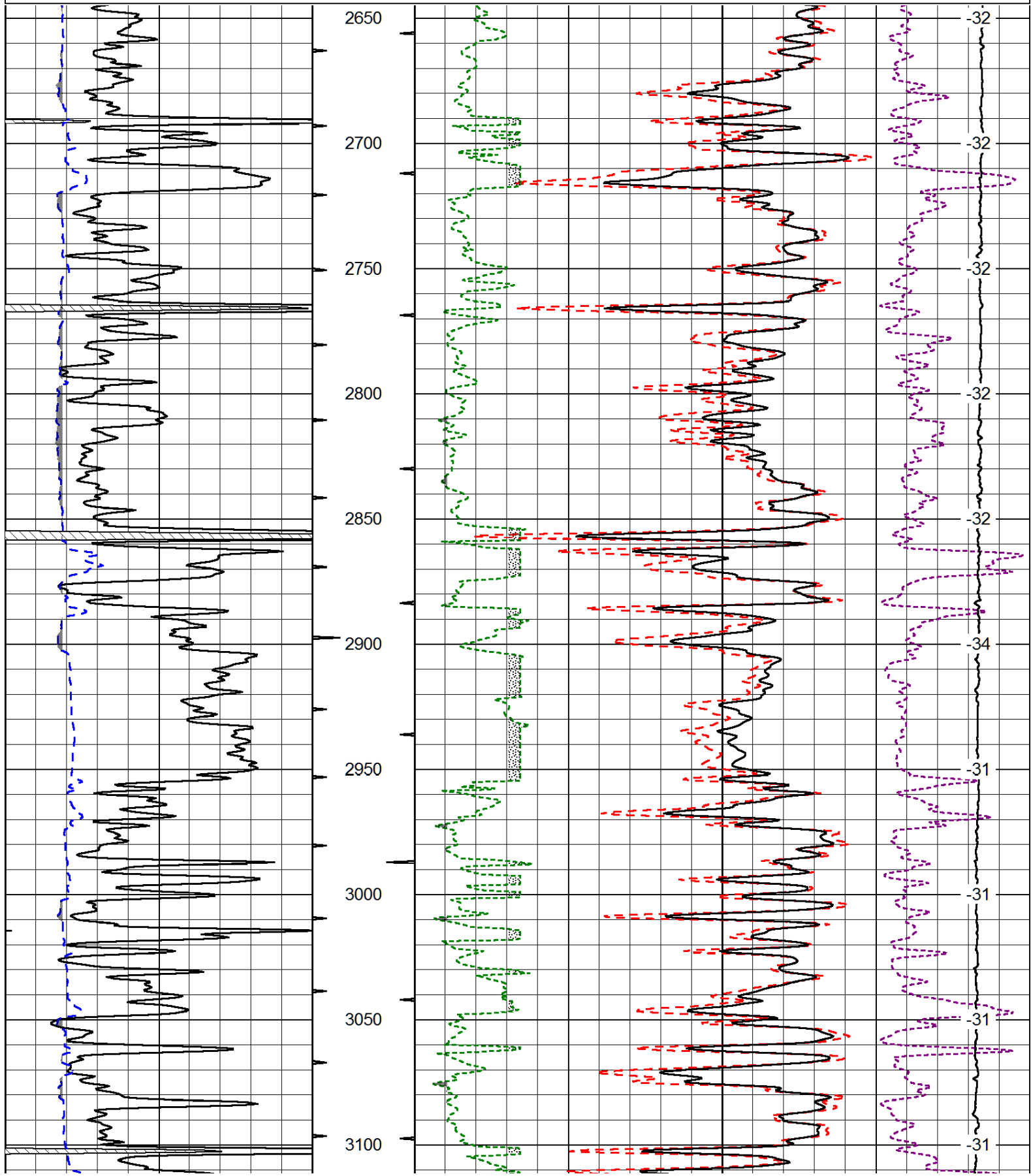
Comments

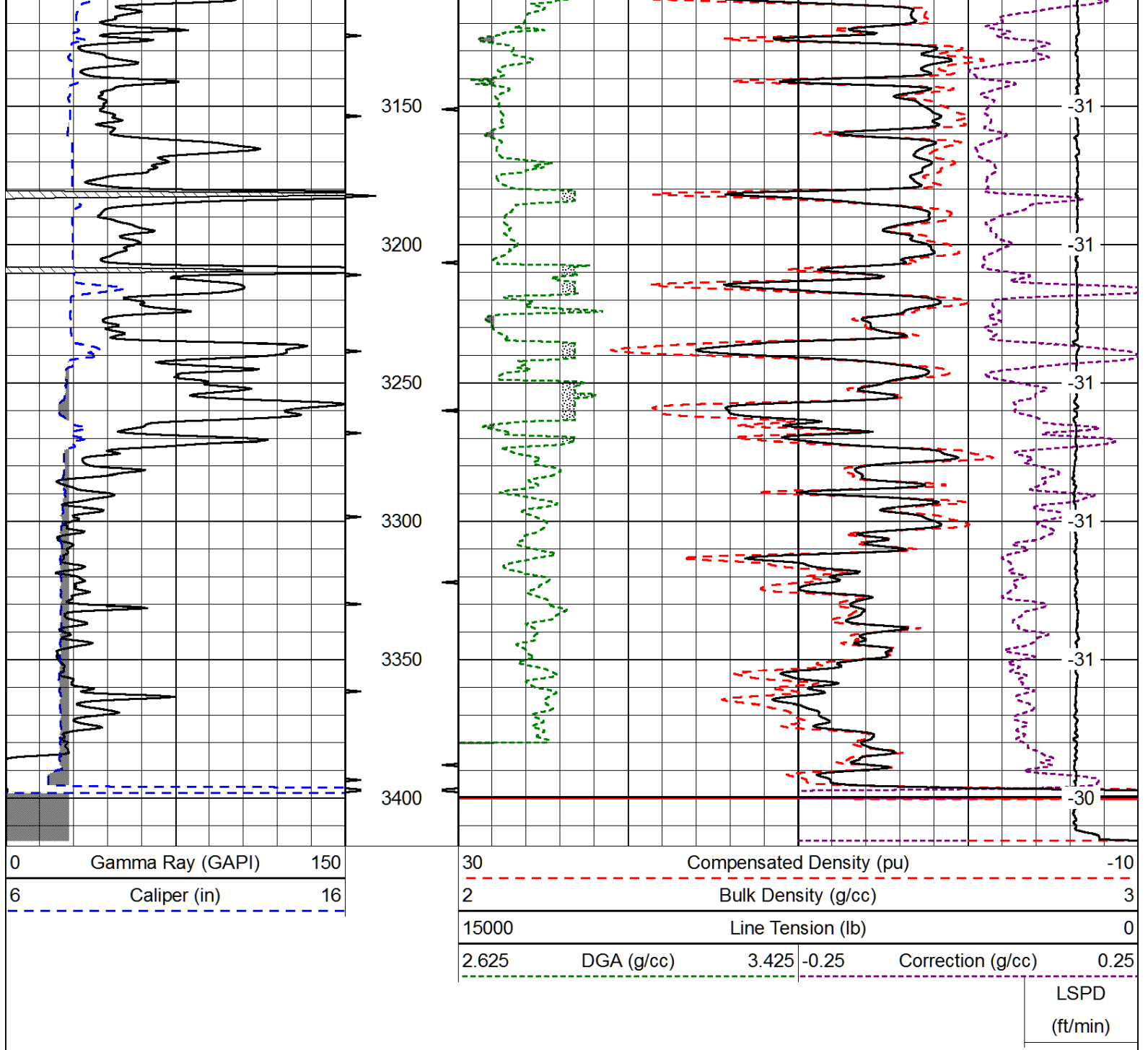
Thank you for using Log-Tech, Inc.
(785) 625-3858

Wilson, 10 South to Avenue N (NE 220 Road), 1 East, 200 Yards North,
East Into

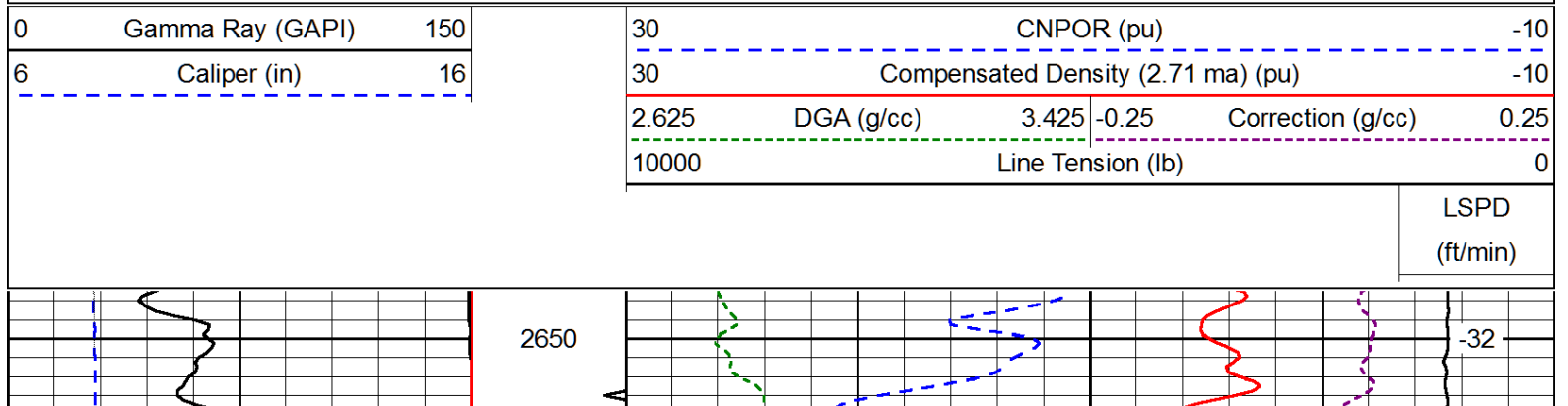
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

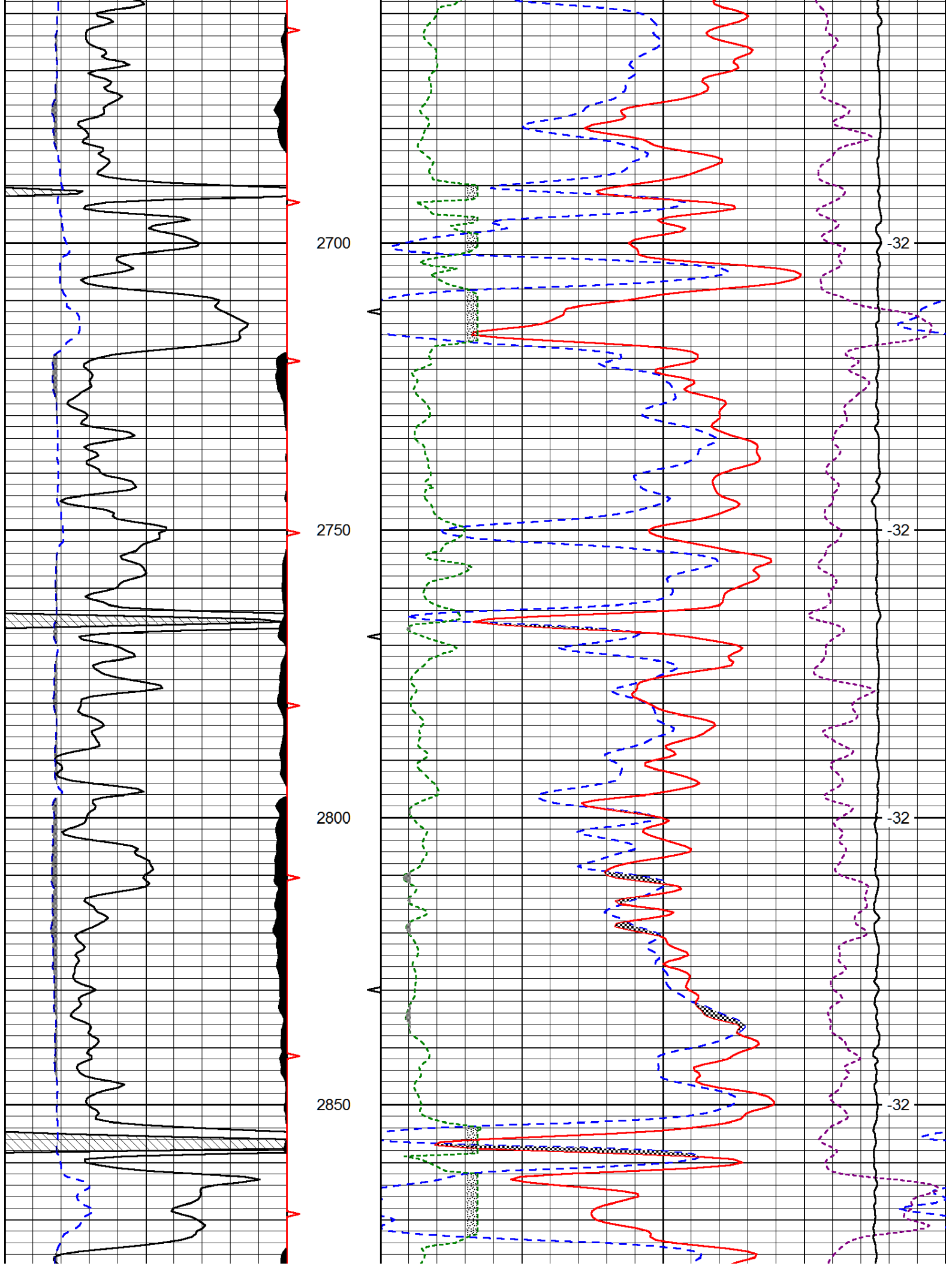
30	Compensated Density (pu)				-10
2	Bulk Density (g/cc)				3
15000	Line Tension (lb)				0
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
					LSPD
					(ft/min)

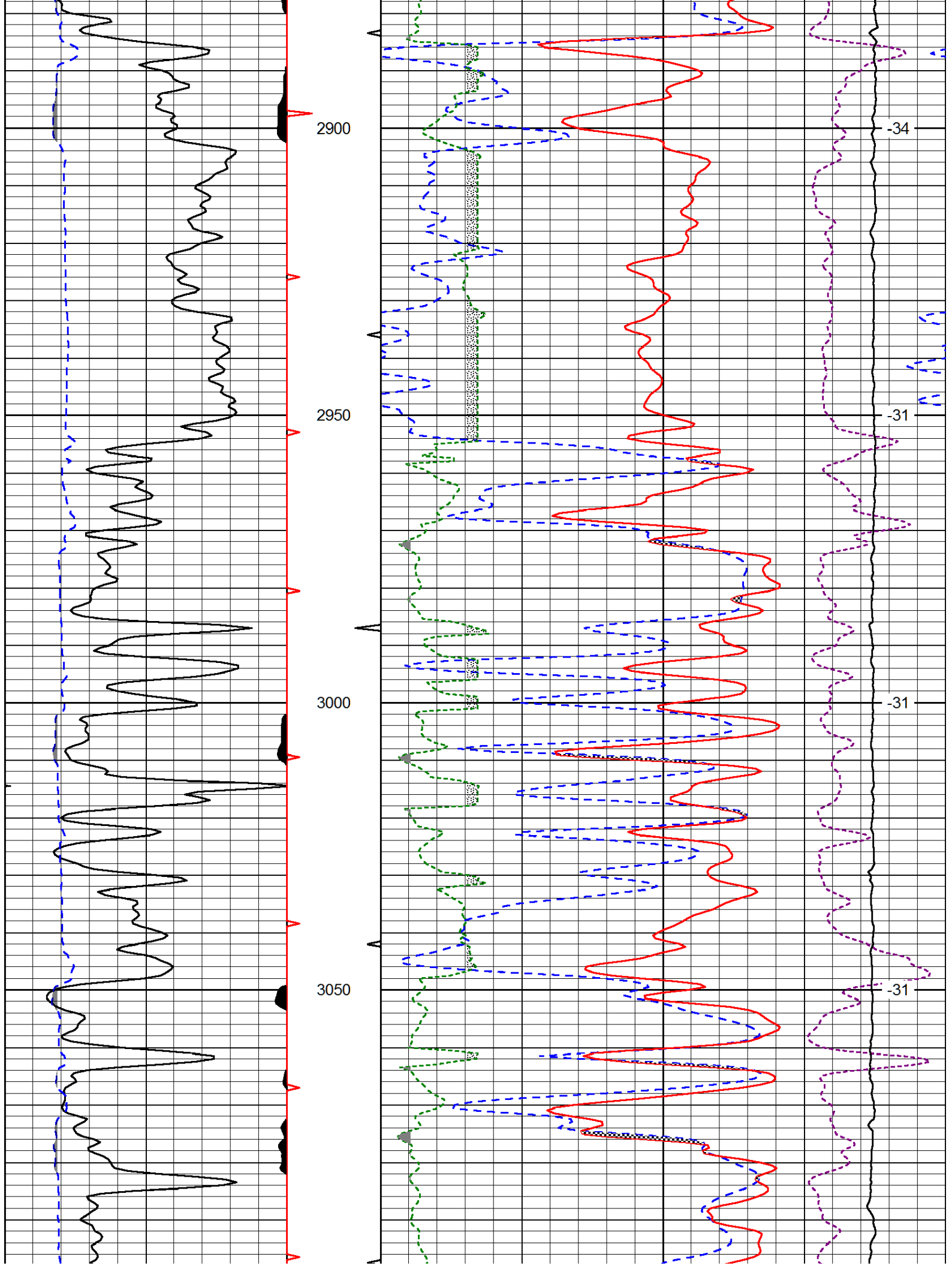


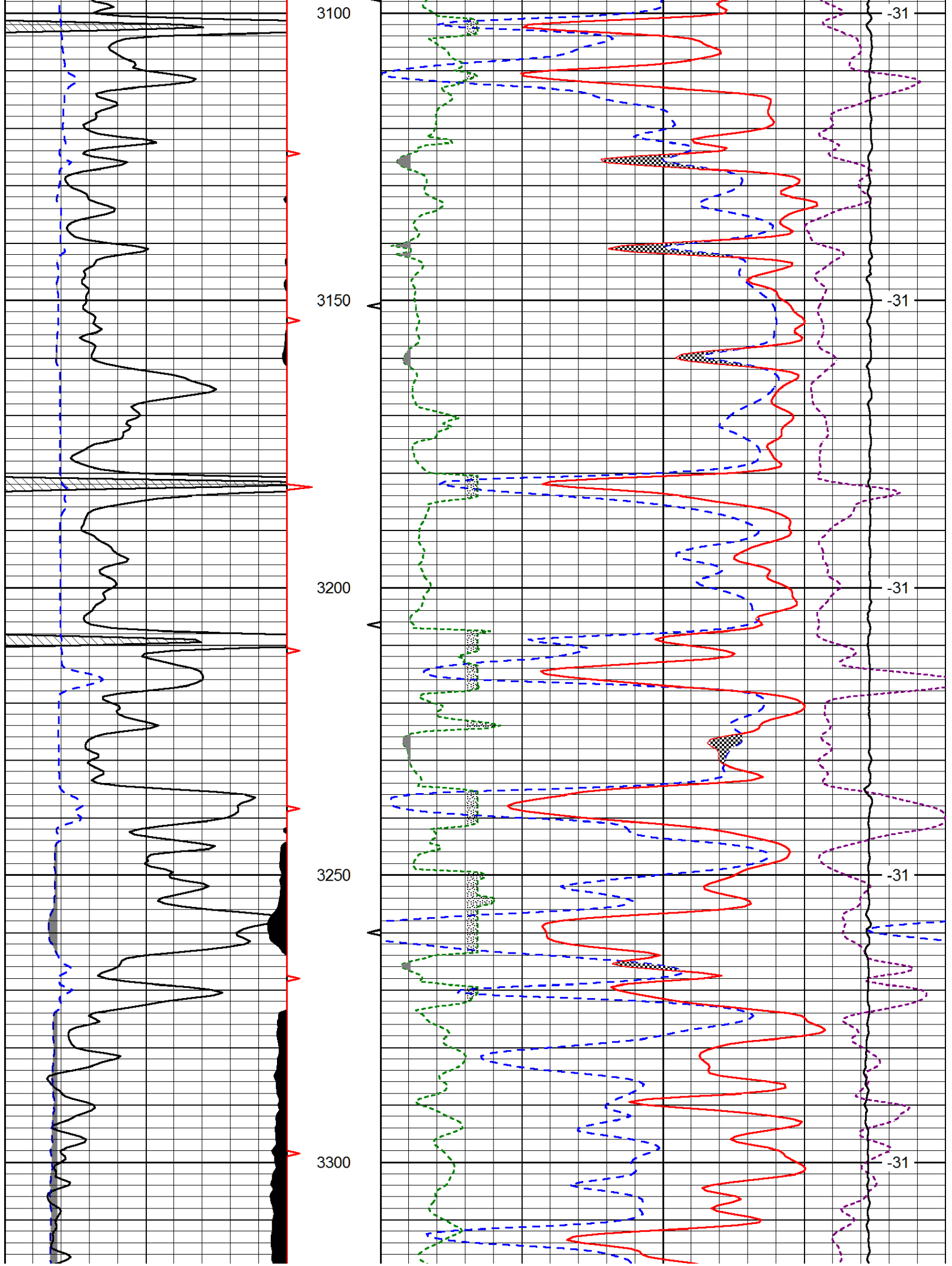


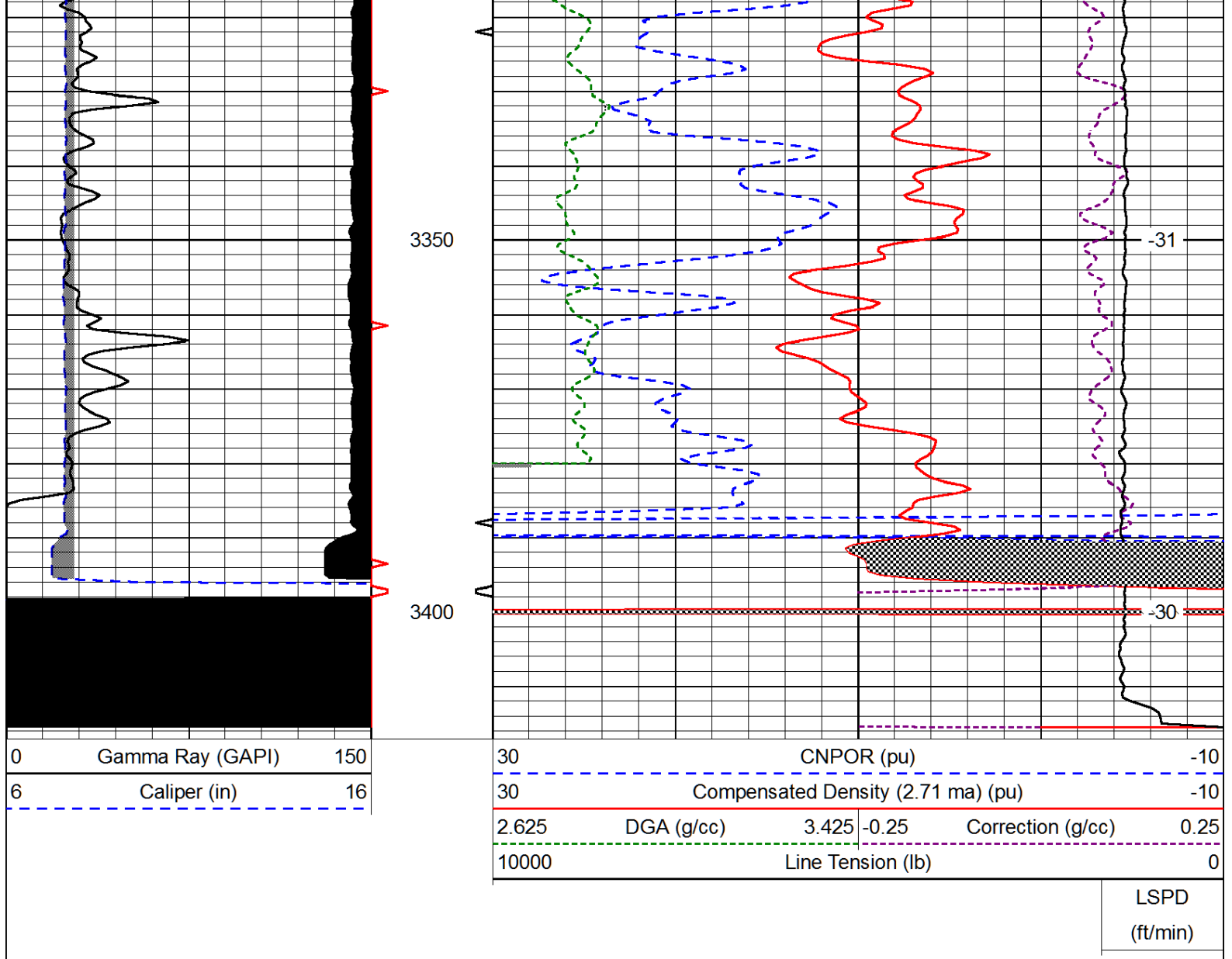
Database File: amwarrior_d&s_1-5hd.db
 Dataset Pathname: dil/awstck
 Presentation Format: cndlspec
 Dataset Creation: Mon Feb 03 06:59:52 2014
 Charted by: Depth in Feet scaled 1:240











0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	CNPOR (pu)				-10
30	Compensated Density (2.71 ma) (pu)				-10
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
10000	Line Tension (lb)				0

LSPD (ft/min)
