PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No.

15-009-25,907-00-00

Company American Warrior, Inc.

Well Eberhardt #3-24

Field Eberhardt

County Barton State Kansas

Location

1254' FNL & 985' FWL

Sec: 24 Twp: 19S Rge: 11W

Other Services

DIL

MEL

Elevation

K.B. 1782

D.F.

G.L. 1774

Permanent Datum Ground Level Elevation 1774

Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Date	11/14/2013		
Run Number	One		
Type Log	CNL / CDL		
Depth Driller	3450		
Depth Logger	3452		
Bottom Logged Interval	3431		
Top Logged Interval	2800		
Type Fluid In Hole	Chemical		
Salinity, PPM CL	8,200		
Density	9.4		
Level	Full		
Max. Rec. Temp. F	111		
Operating Rig Time	3 Hours		
Equipment -- Location	17	Hays	
Recorded By	C. Desaire		
Witnessed By	Jim Musgrove		

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	310	8.625	24#	00	310
2	7.875	310	3450				

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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.pioneeres.com

785 625 3858

Ellinwood KS,

1 1/2 N on Hirsch St, 4 E, 1/2 N, E Into

Database File: c:\warrior\data\aamwar_eberhardt #3-24\awhd.db

Dataset Pathname: dil/awstk

Presentation Format: cdl

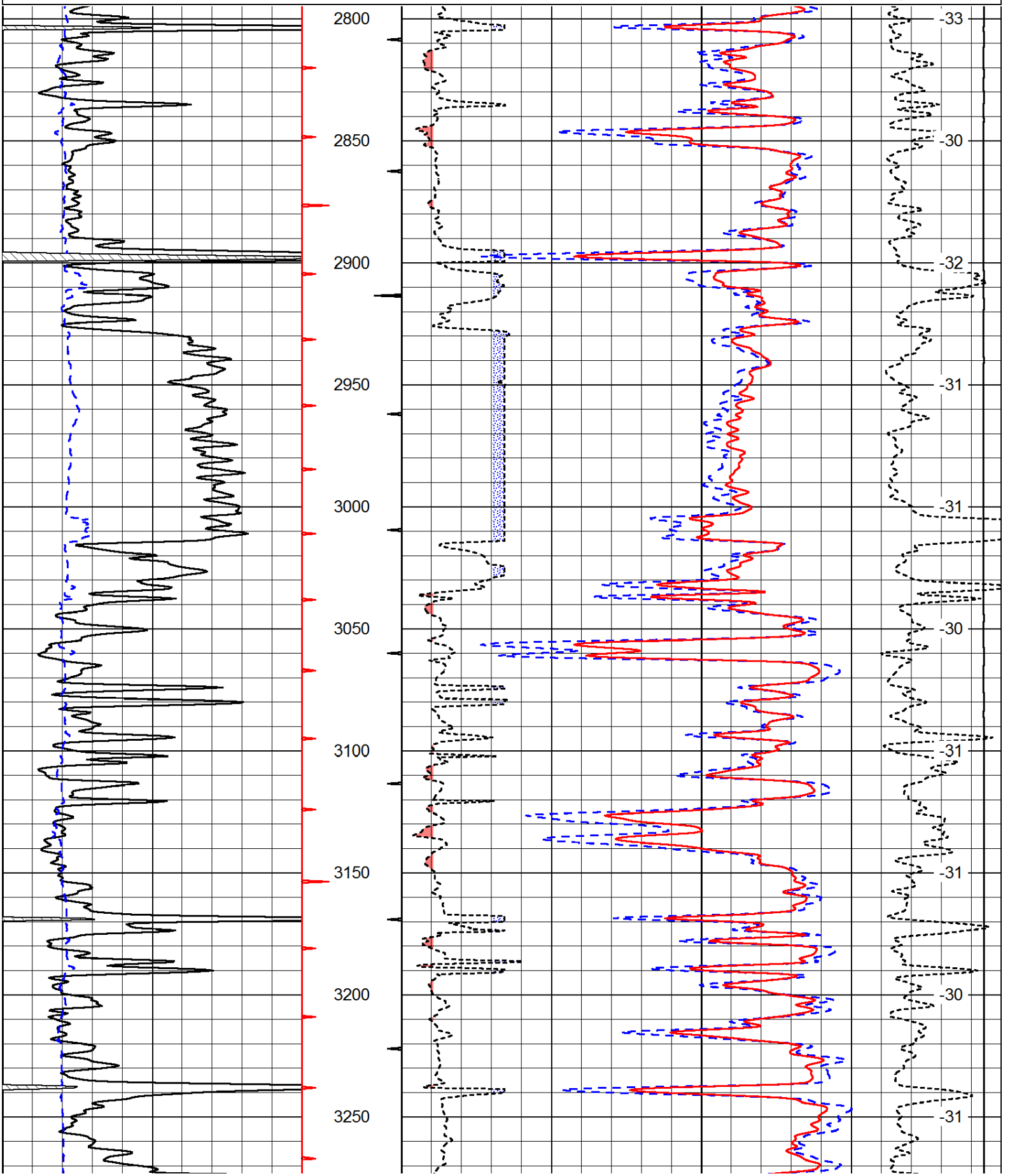
Dataset Creation: Fri Nov 15 00:08:49 2013

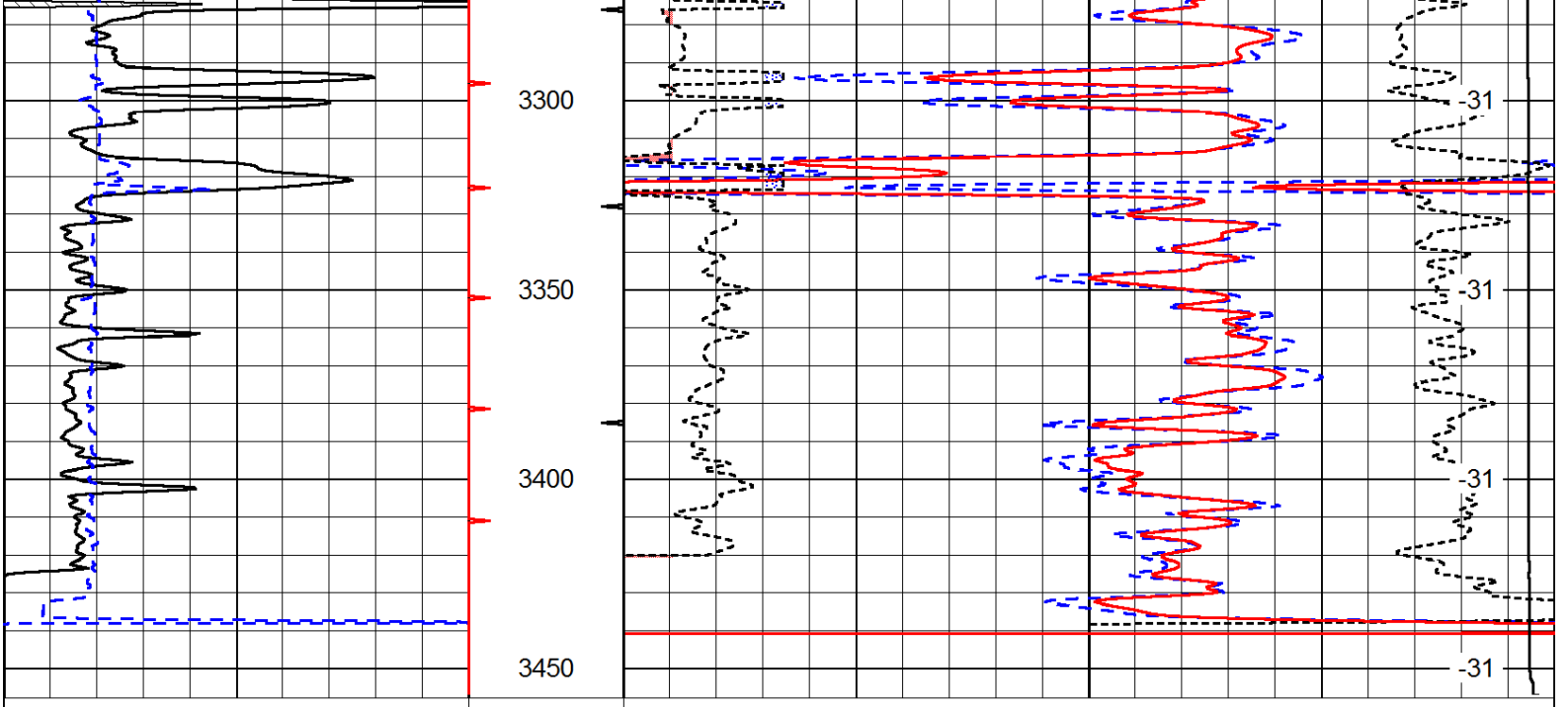
Charted by: Depth in Feet scaled 1:600

Charted by: Depth in Feet scaled 1:600

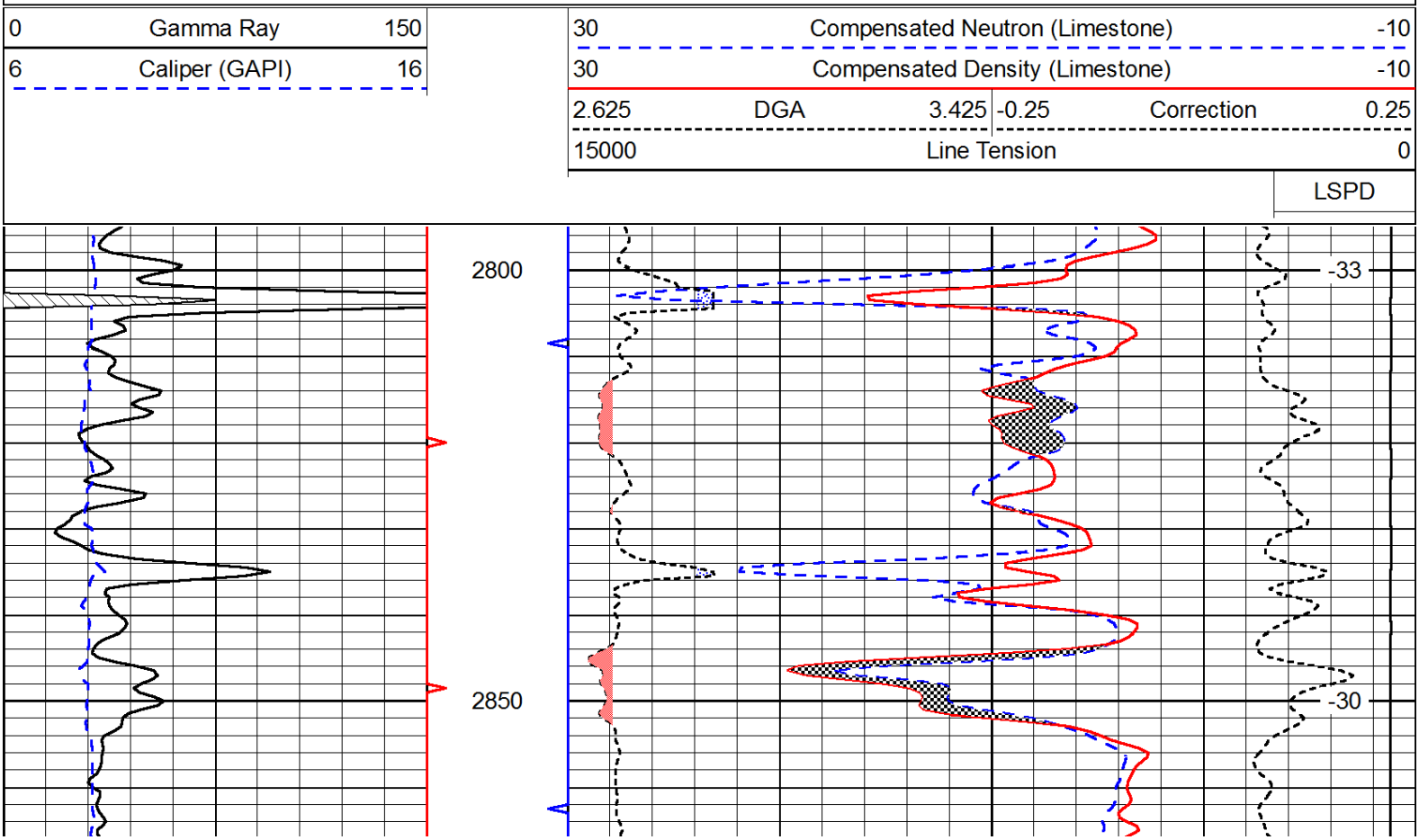
0	Gamma Ray	150
6	Caliper (GAPI)	16

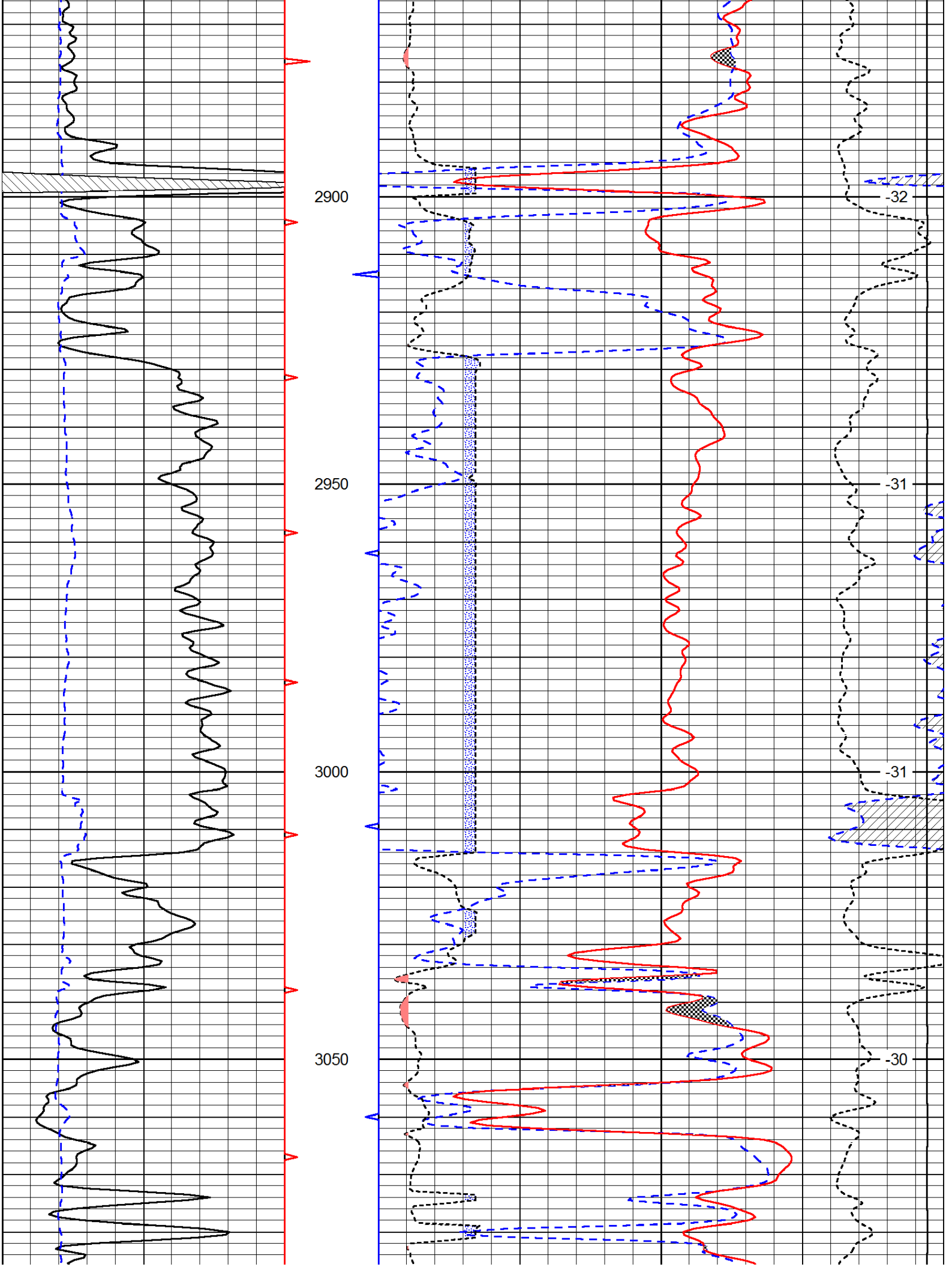
30	Compensated Density				-10
2	Bulk Density				3
15000	Line Tension				0
2.625	DGA	3.425	-0.25	Correction	0.25
					LSPD

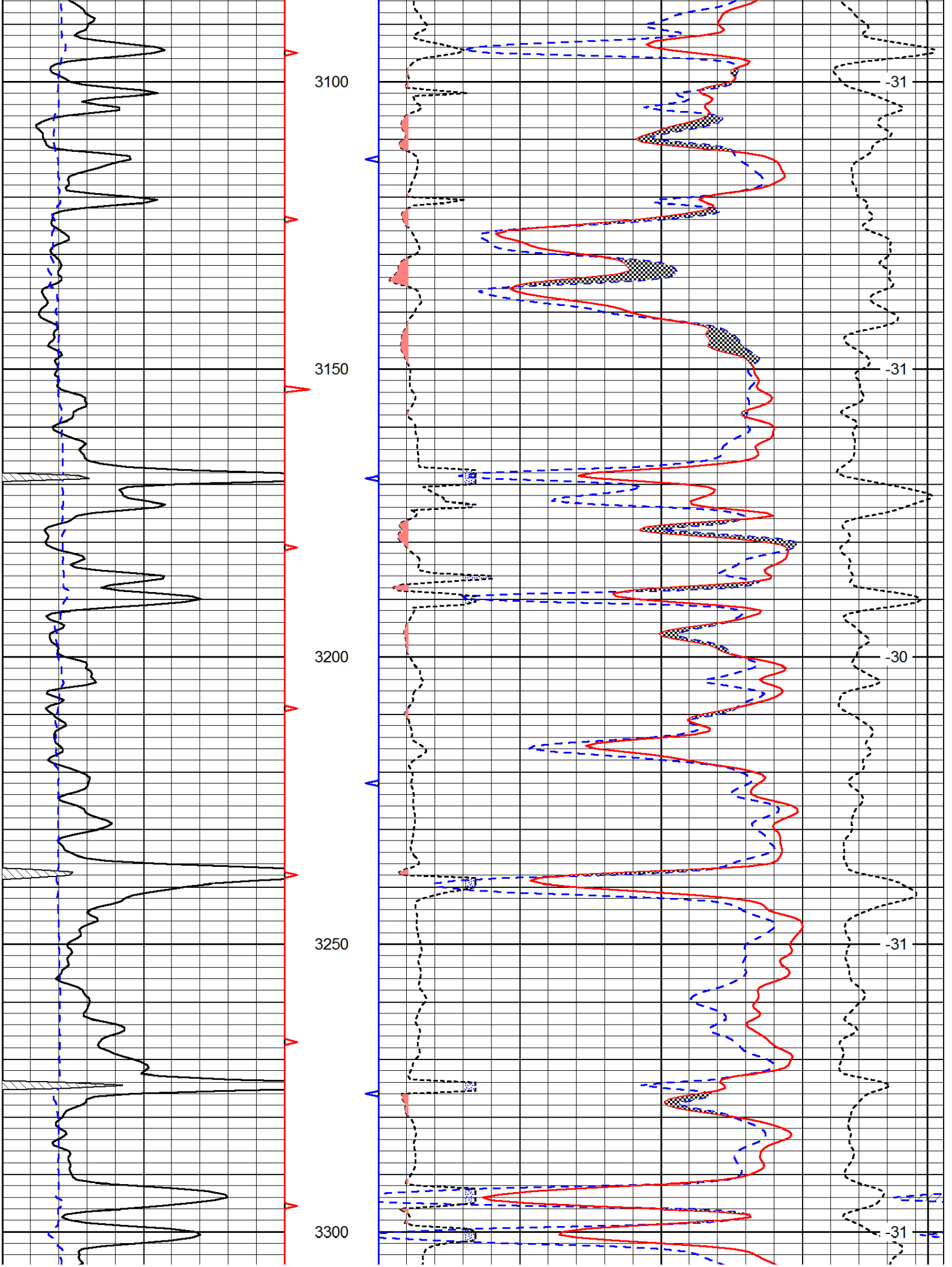




Database File: c:\warrior\data\aamwar_eberhardt #3-24\awhd.db
Dataset Pathname: dil/awstk
Presentation Format: cndlspec
Dataset Creation: Fri Nov 15 00:08:49 2013
Charted by: Depth in Feet scaled 1:240




2900
2950
3000
3050
-32
-31
-31
-30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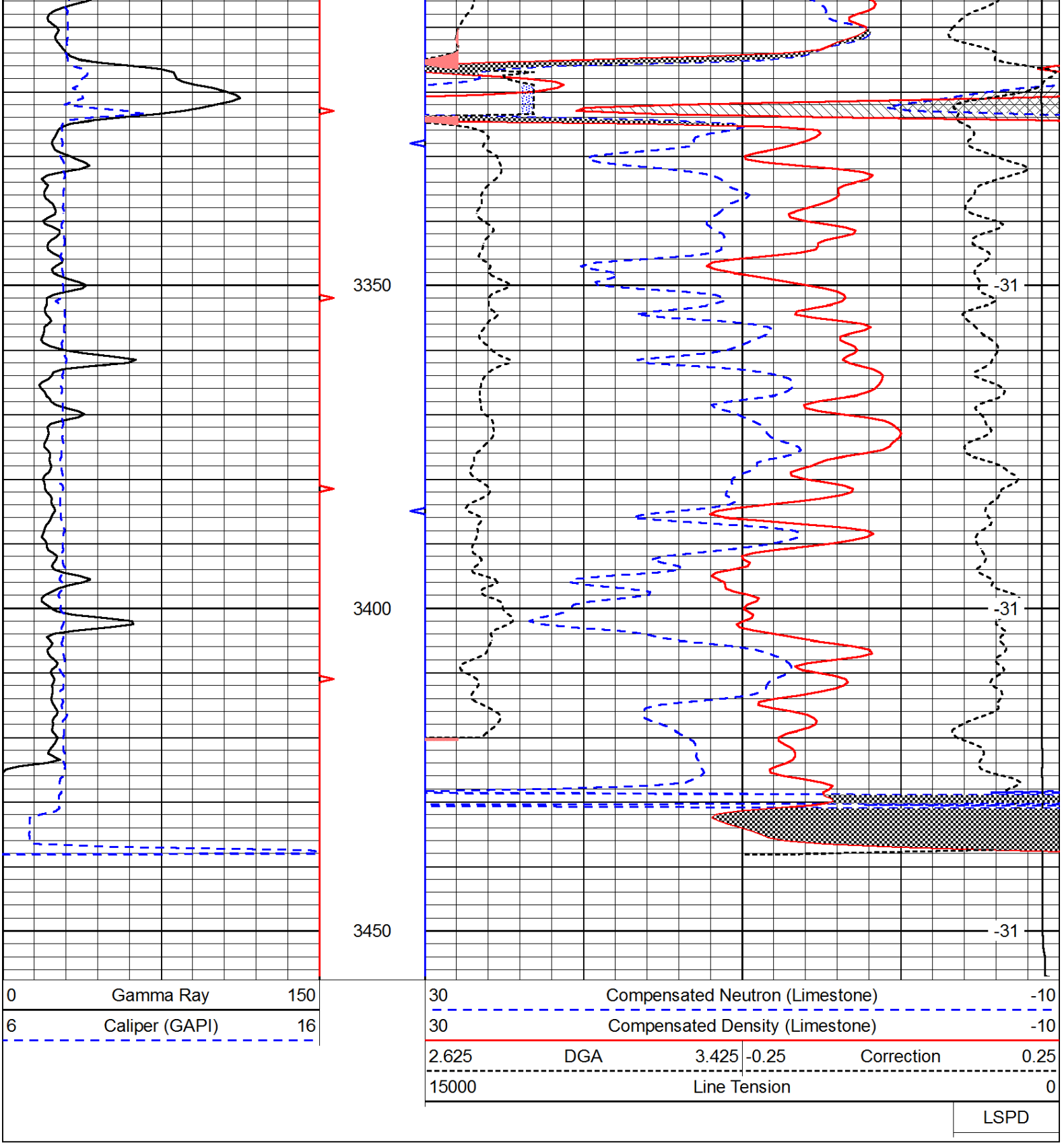
3150
3200
3250
3300
-31
-31
-30
-31
-31


3350
3400
3450
-31
-31
-31
0 Gamma Ray 150
6 Caliper (GAPI) 16
30 Compensated Neutron (Limestone) -10
30 Compensated Density (Limestone) -10
2.625 DGA 3.425
-0.25 Correction 0.25
15000 Line Tension 0
LSPD