PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No. 15-065-24,053-00-00

Company H&C Oil Operating, Inc.

Well Newell #23-2

Field

County Graham State Kansas

Location 600' FSL & 2,550' FEL

Sec: 23 Twp: 8S Rge: 21W

Other Services
DIL
MEL

Elevation
K.B. 2088
D.F.
G.L. 2080

Permanent Datum	Ground Level
Log Measured From	Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing
Date	7/28/2014
Run Number	One
Type Log	CNL / CDL
Depth Driller	3621
Depth Logger	3621
Bottom Logged Interval	3600
Top Logged Interval	2950
Type Fluid In Hole	Chemical
Salinity, PPM CL	4000
Density	9.2
Level	Full
Max. Rec. Temp. F	112
Operating Rig Time	3 1/2 Hours
Equipment -- Location	108 Hays
Recorded By	J. Long
Witnessed By	Marc Downing

Borehole Record

Run No.	Bit	From	To
1	12.25	00	221
2	7.875	221	3621

Casing Record

Size	Wgt.	From	To
8.625	24#	00	221

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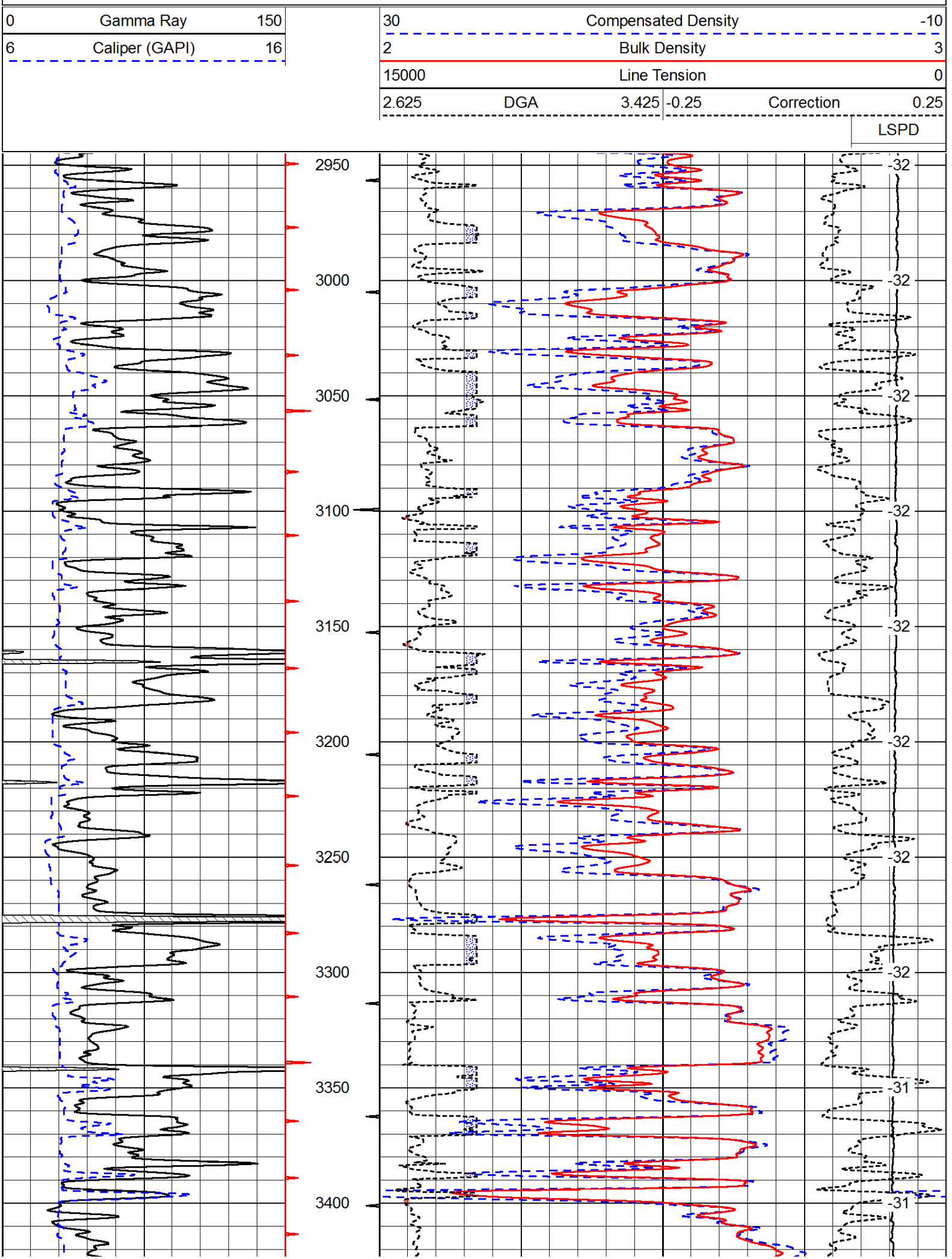
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

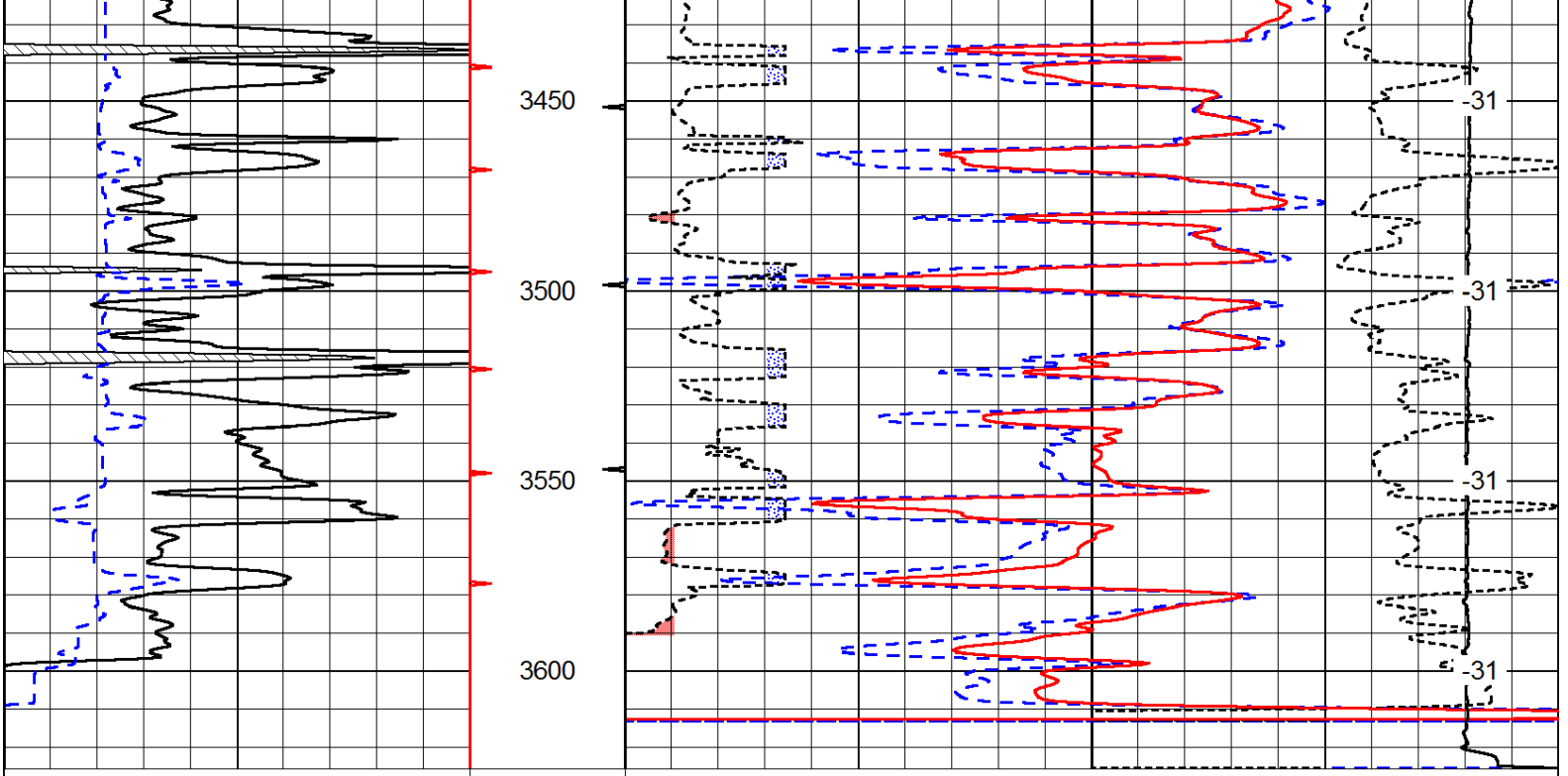
Comments

Thank you for using Pioneer Energy Services
www.pioneeres.com
785 625 3858

Damar, 2 1/2 Northwest on Highway 18 to Road 390, 1/4 South, 1/3 West, Northwest Into

Database File:	c:\warrior\data\h&c_newell #23-2\h&c_newell_23-2hd.db
Dataset Pathname:	dil/hcstck
Presentation Format:	cdl
Dataset Creation:	Mon Jul 28 05:48:15 2014
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
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
-32
-32
-32
-32
-32
-32
-31
-31



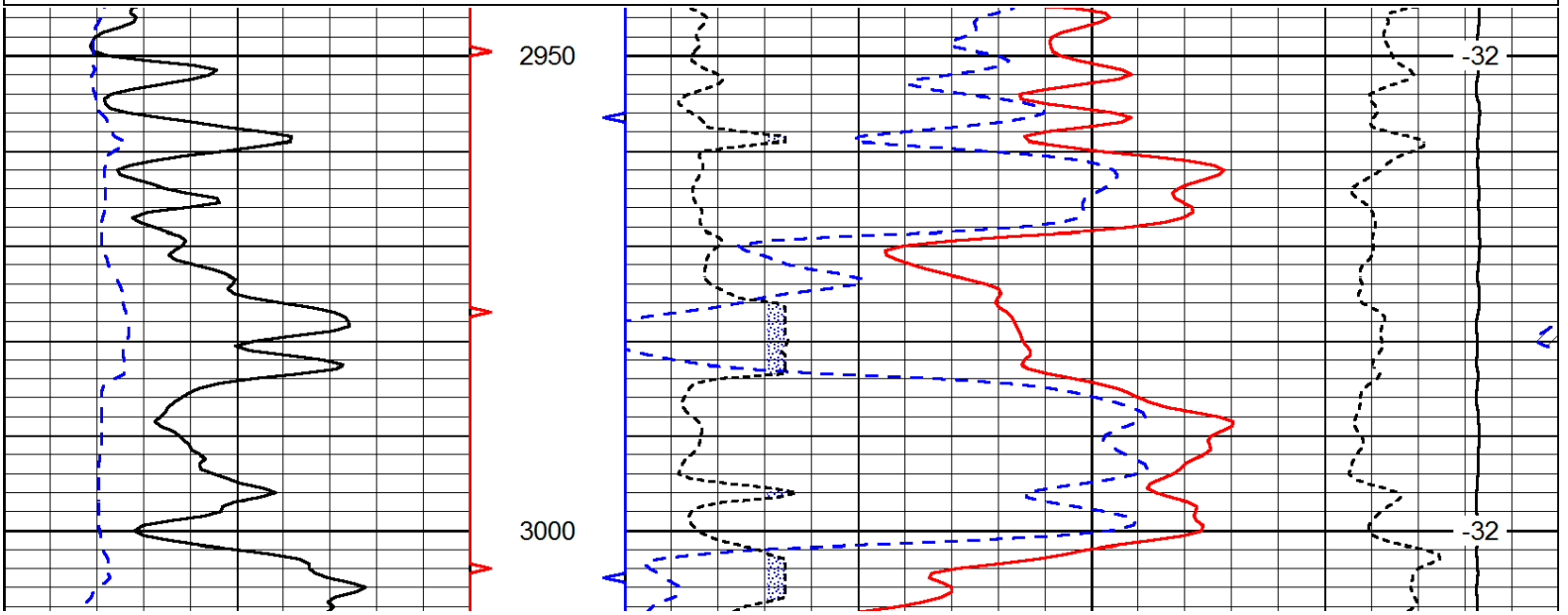
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6	Caliper (GAPI)	16

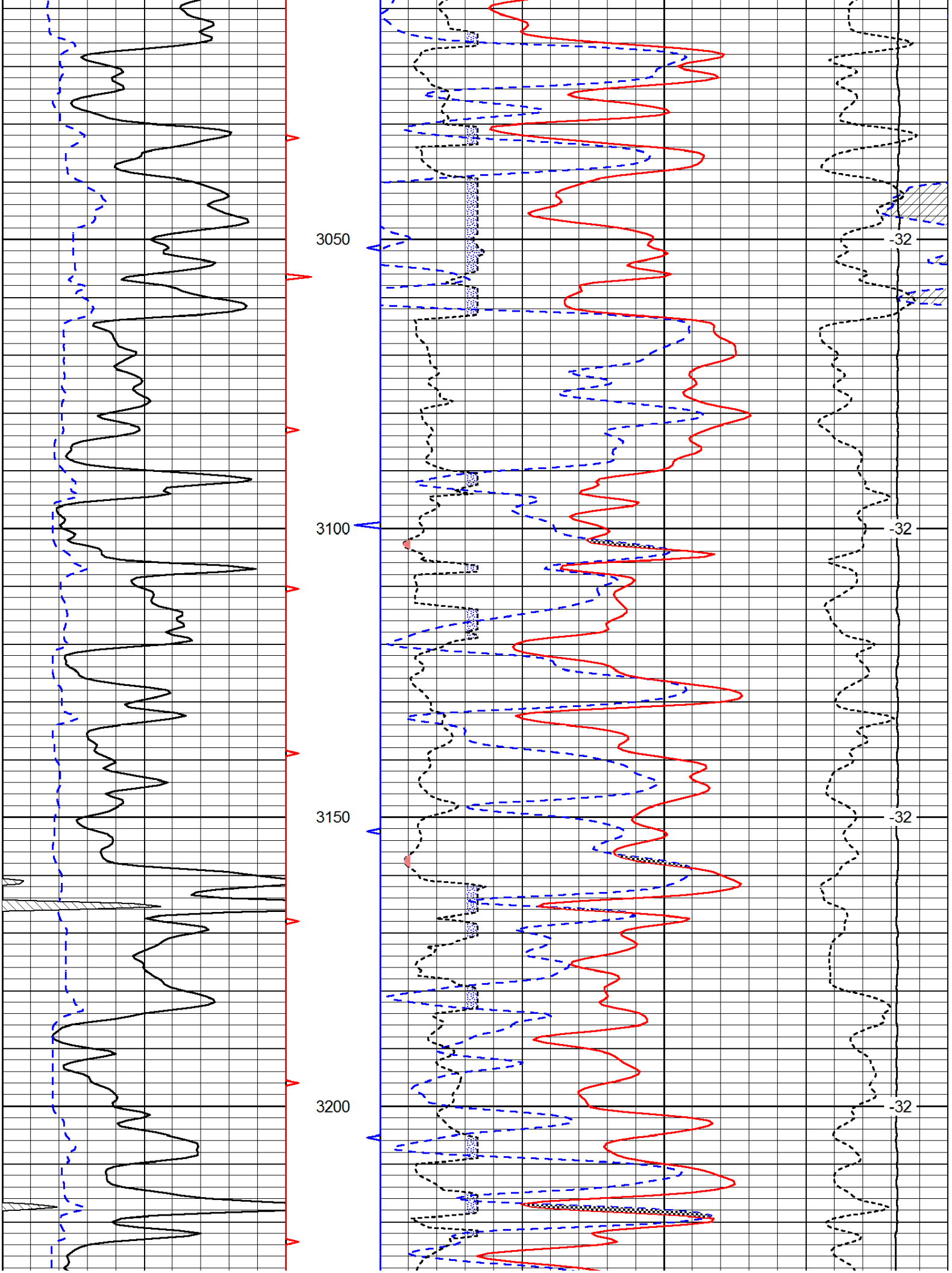
30	Compensated Density	-10
2	Bulk Density	3
15000	Line Tension	0
2.625	DGA 3.425	-0.25 Correction 0.25
	LSPD	

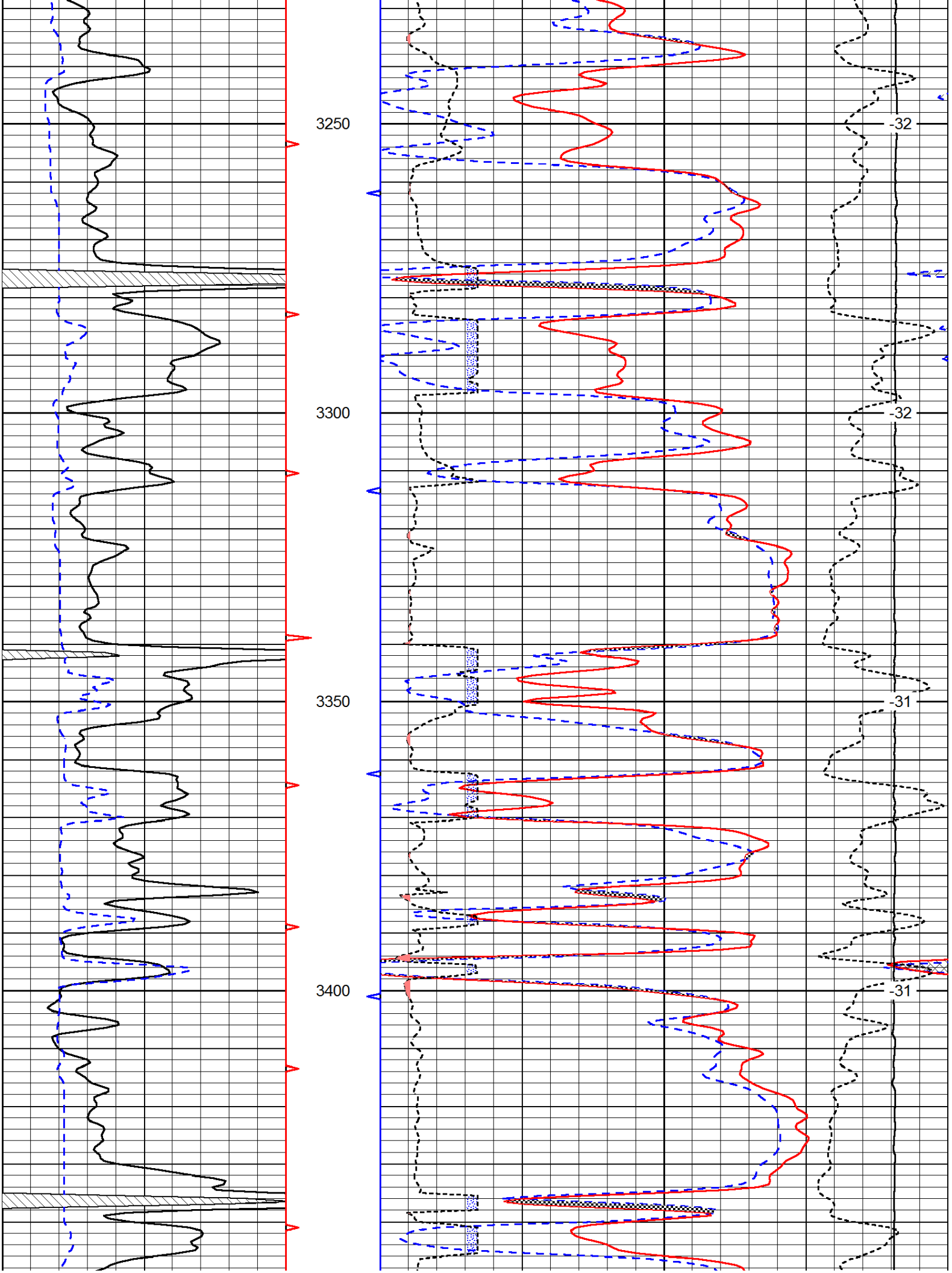
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Charted by:	Depth in Feet scaled 1:240

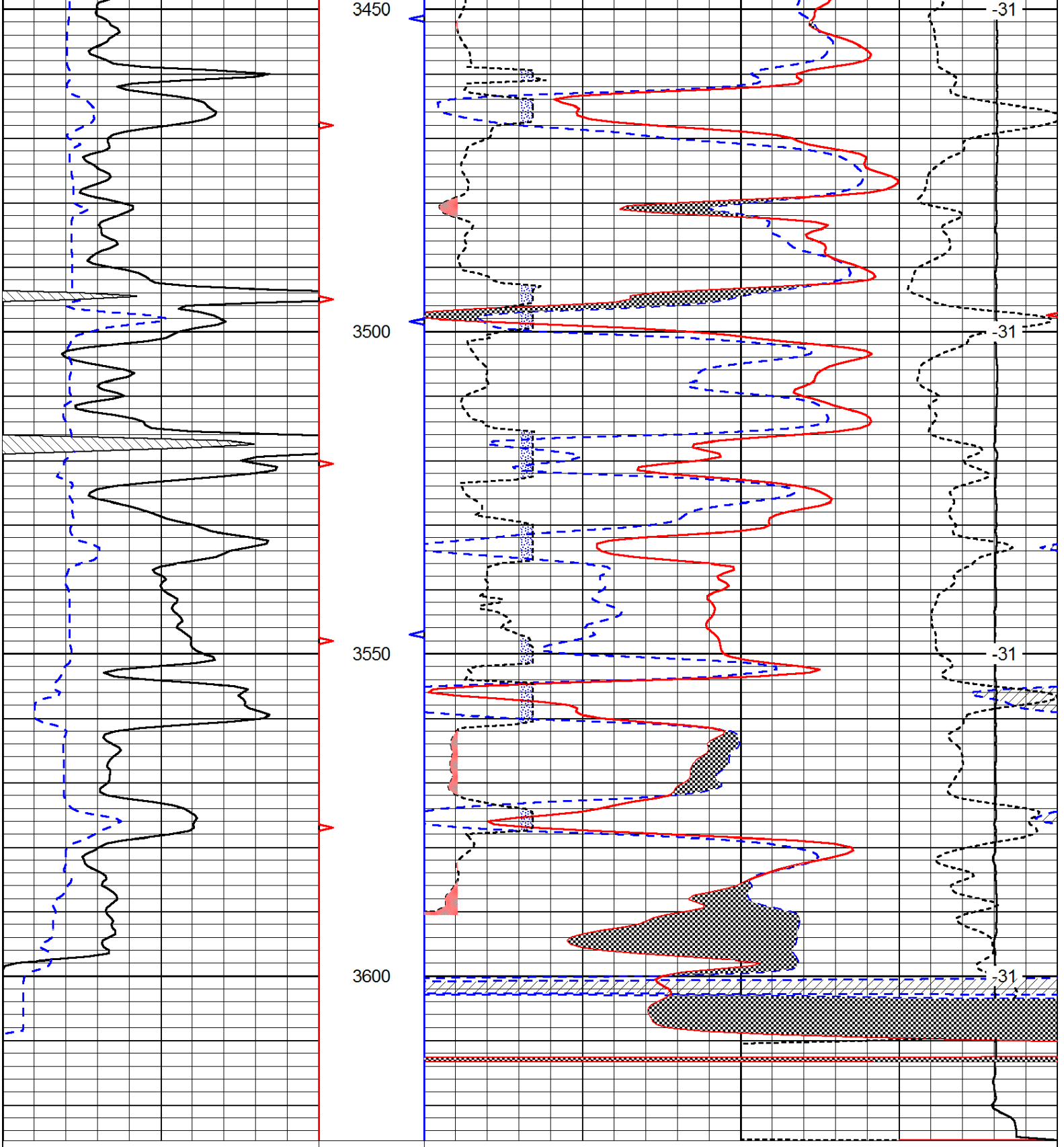
0	Gamma Ray	150
6	Caliper (GAPI)	16

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	




3050
3100
3150
3200
-32
-32
-32
-32


3250
3300
3350
3400
-32
-32
-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