



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-155-21632-00-00

Company **Novy Oil & Gas, Inc.**

Well **Zwick #1**

Field **Sterling SW**

County **Reno**

State **Kansas**

Location **660' FSL & 710' FEL**

Sec: **17**

Twp: **22S**

Rge: **8W**

Other Services
DIL/MEL

Permanent Datum **Ground Level** Elevation **1695**

Log Measured From **Kelly Bushing** 10 Ft. Above Perm. Datum

Elevation
K.B. **1705**
D.F. **1695**
G.L. **1695**

Date **2/1/2013**

Run Number **One**

Type Log **CNL / CDL**

Depth Driller **3650**

Depth Logger **3648**

Bottom Logged Interval **3627**

Top Logged Interval **2800**

Type Fluid In Hole **Chemical**

Salinity, PPM CL **12500**

Density **9.25**

Level **Full**

Max. Rec. Temp. F **115**

Operating Rig Time **4 Hours**

Equipment -- Location **91 Hays**

Recorded By **D. Schmidt**

Witnessed By **Macklin Armstrong**

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	265	8.625	23#	00	265
Two	7.875	265	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

Sterling,
5 South to 82 Rd, 3/4 West to Bonesprings Rd, 3/4 South,
West into

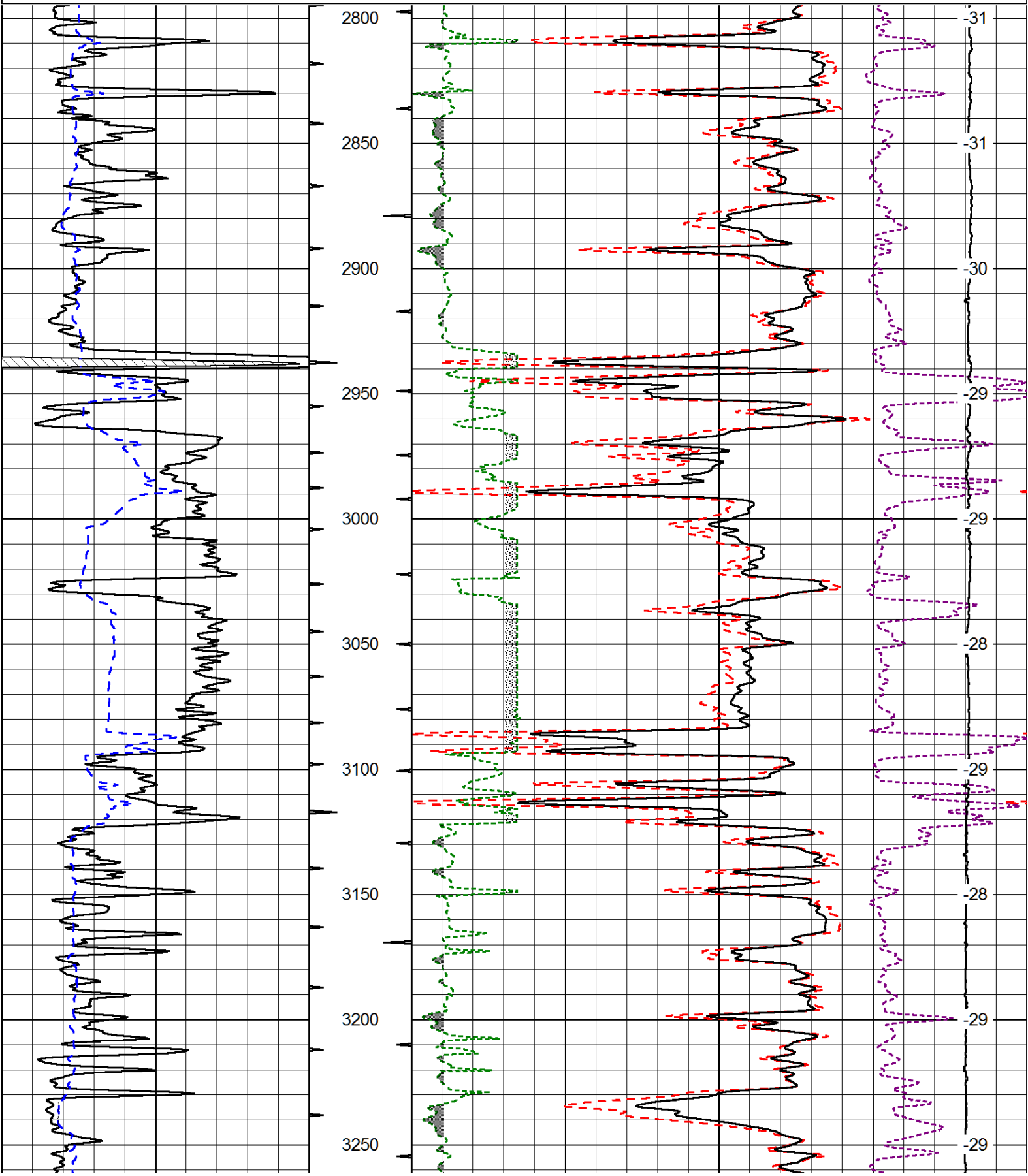
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Dataset Pathname: dil/novy
Presentation Format: cdl
Dataset Creation: Fri Feb 01 20:48:39 2013
Charted by: Depth in Feet scaled 1:600

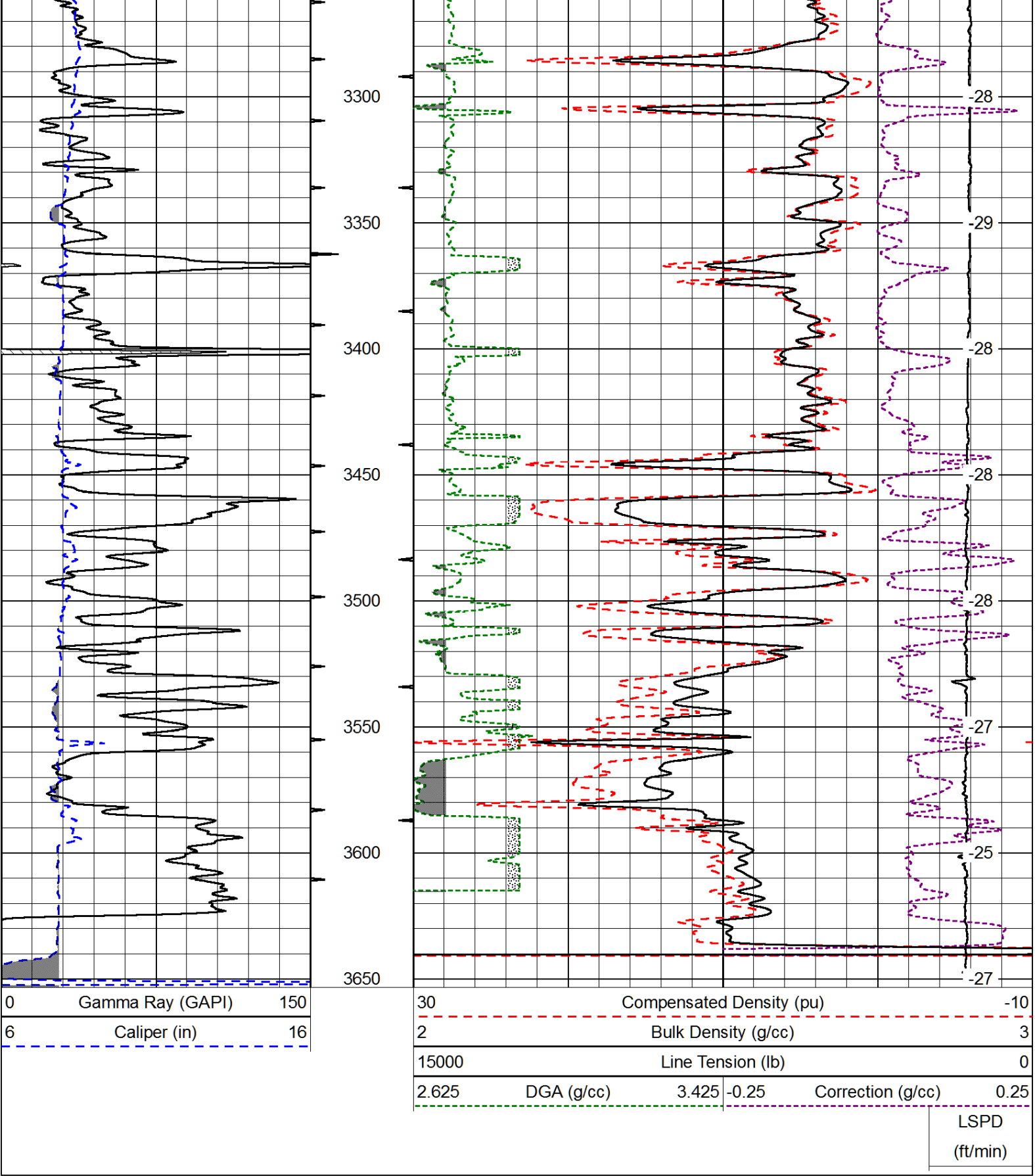
Charted by: Depth in Feet scaled 1:6000

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

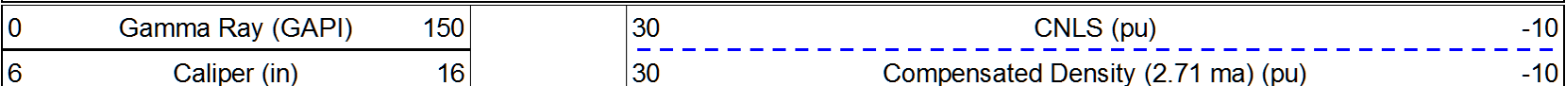
30	Compensated Density (pu)		-10
2	Bulk Density (g/cc)		3
15000	Line Tension (lb)		0
2.625	DGA (g/cc)	3.425	-0.25
		Correction (g/cc)	0.25

LSPD
(ft/min)



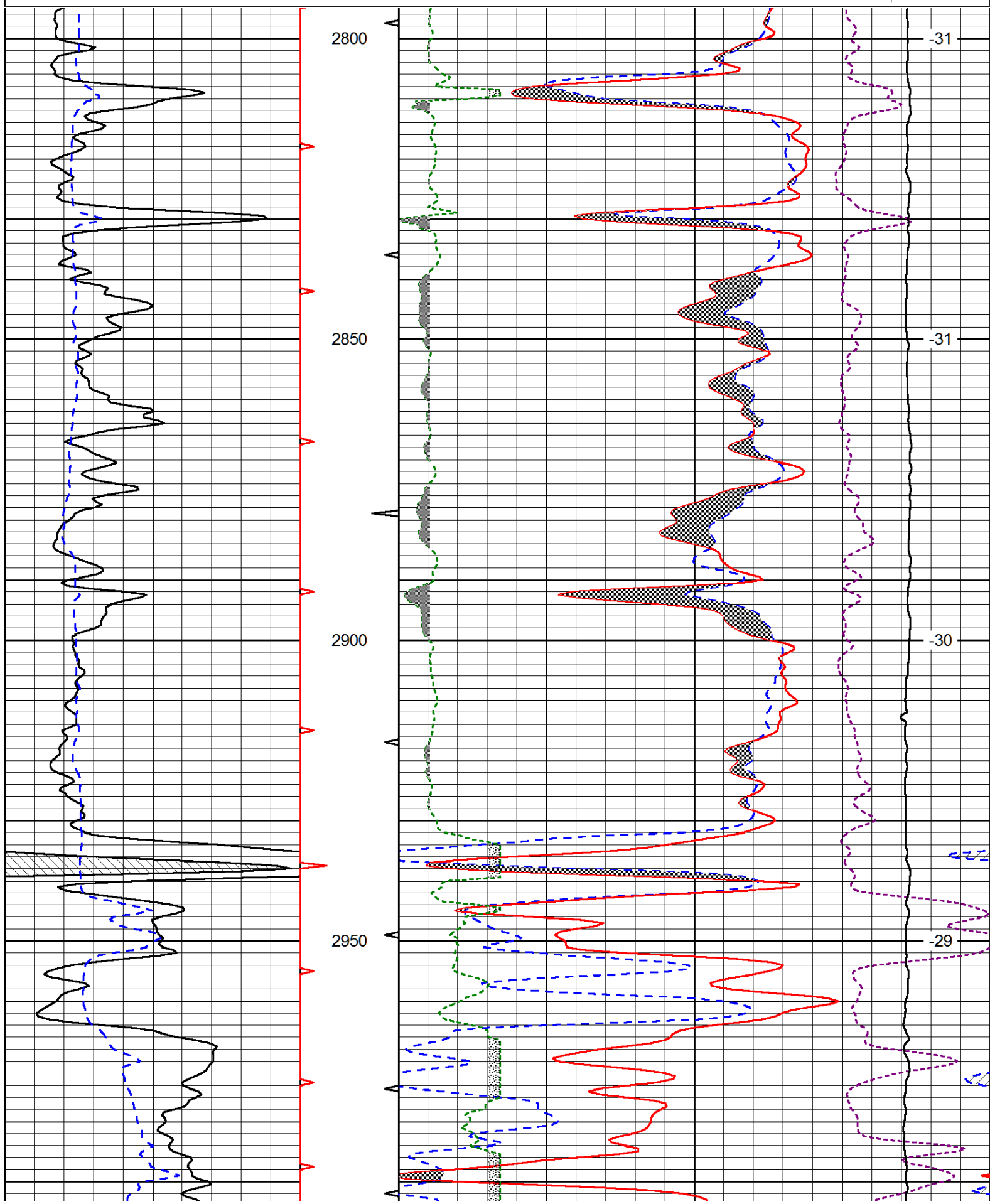


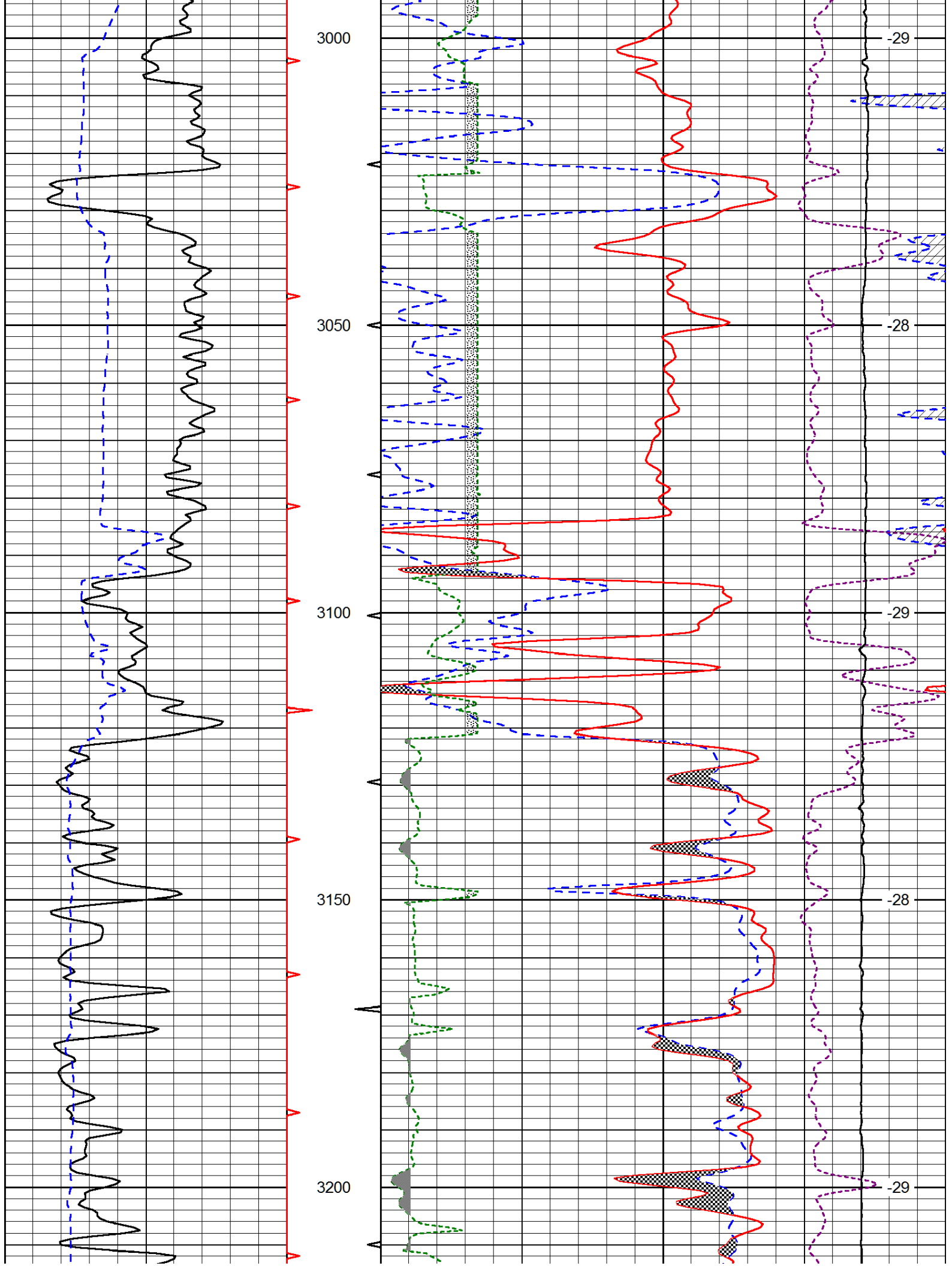
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Charted by: Depth in Feet scaled 1:240

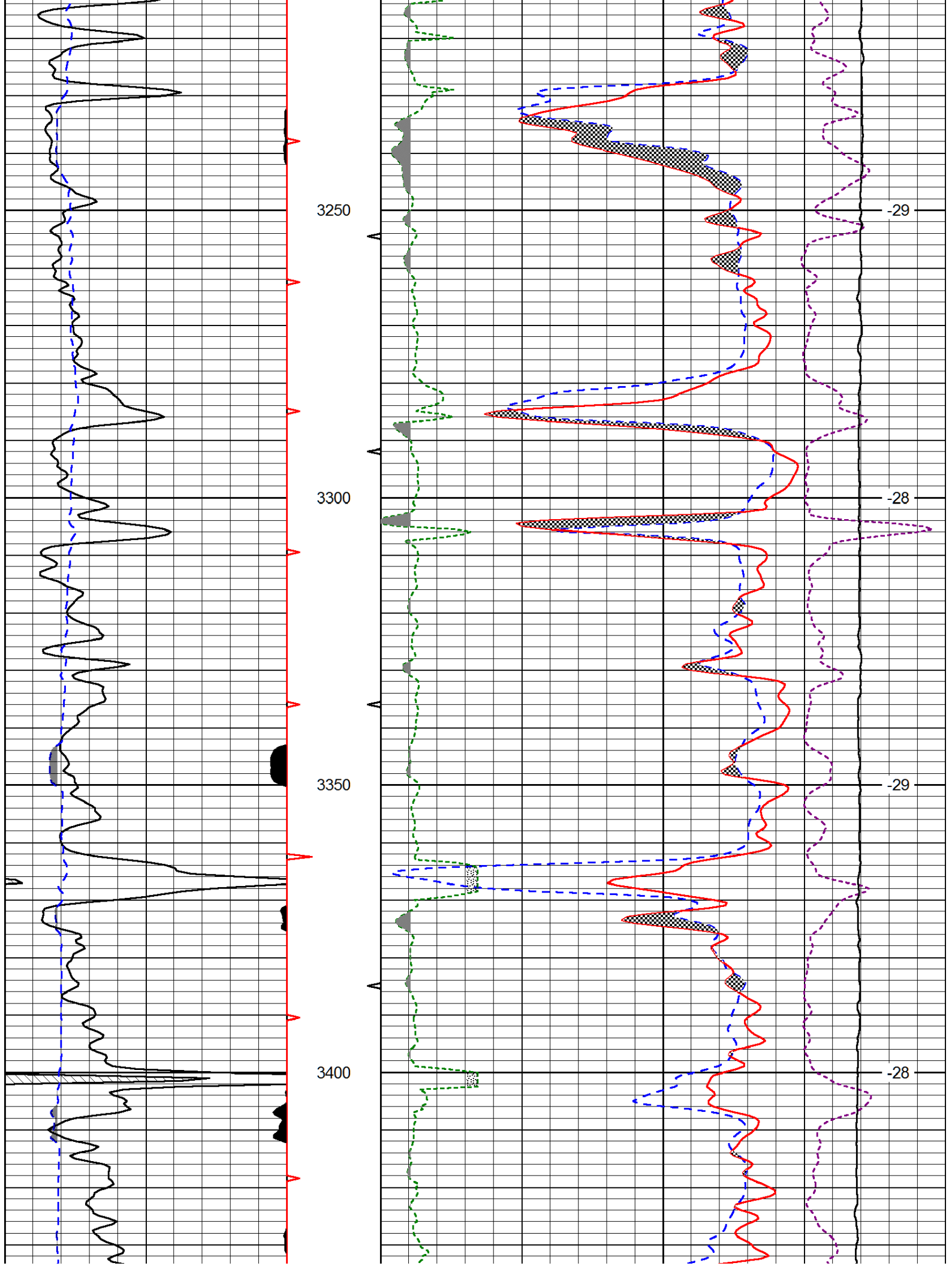


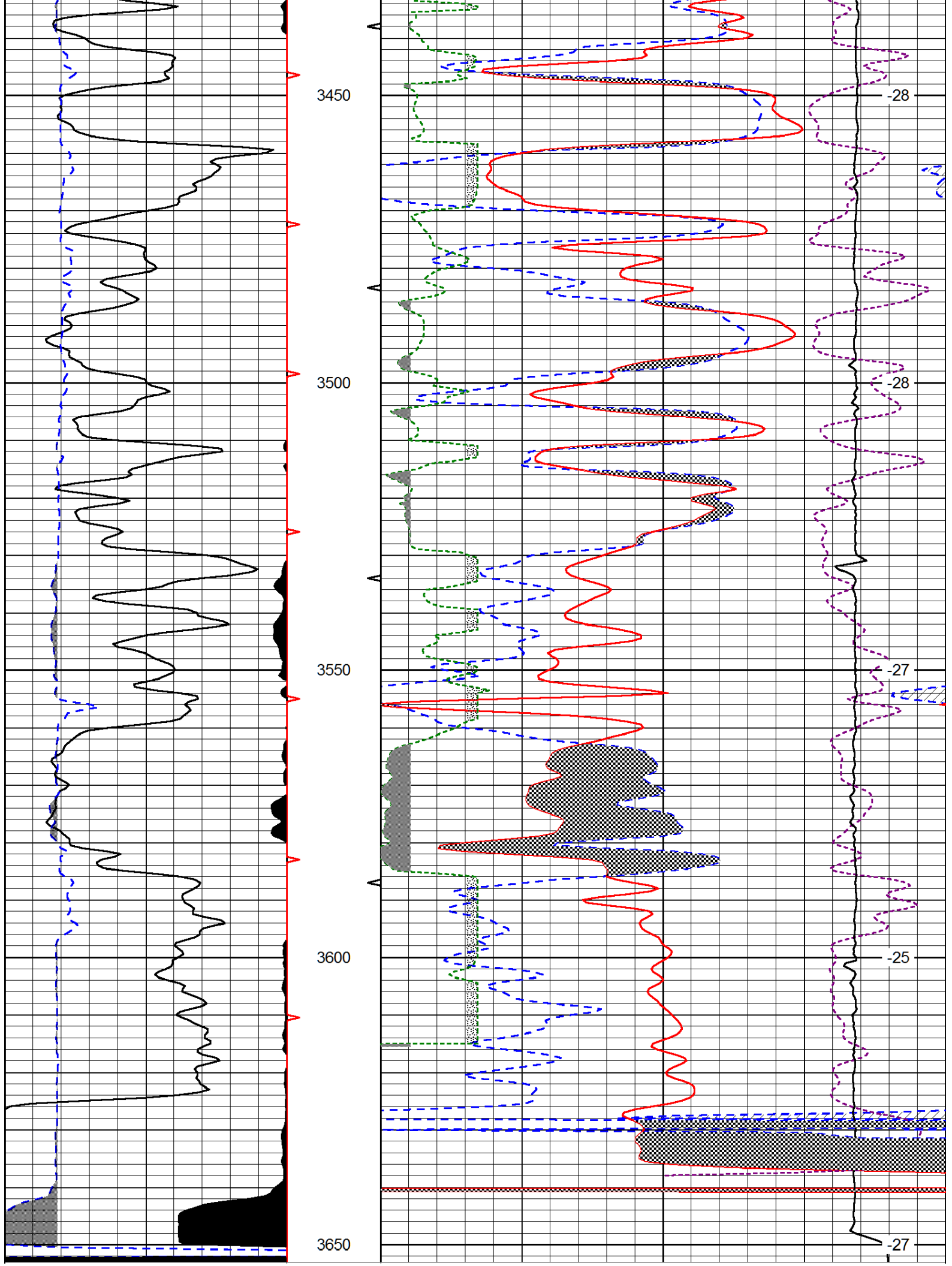
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
10000	Line Tension (lb)				0

LSPD
(ft/min)









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

30		CNLS (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)	