



Pioneer Energy Services

Dual Compensated Porosity Log

API No. 15-009-25,778-00-00

Company **LD Drilling, Inc.**
 Well **Lyle No. 1-14**
 Field **Chase-Silica**
 County **Barton** State **Kansas**

Location **SE-NW-NW-NW
4701' FSL & 554' FWL**

Sec: 14 Twp: 20S Rge: 11W

Other Services
DILMEL

Permanent Datum Ground Level Elevation 1754
 Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
 Drilling Measured From Kelly Bushing

K.B. 1759
 D.F. 1754
 G.L. 1754

Date 7/12/2013

Run Number One

Type Log CNL / CDL

Depth Driller 3400

Depth Logger 3401

Bottom Logged Interval 3380

Top Logged Interval 2700

Type Fluid In Hole Chemical

Salinity, PPM CL 7,000

Density 8.7

Level Full

Max. Rec. Temp. F 110

Operating Rig Time 4 Hours

Equipment -- Location 15 Hays

Recorded By J. Henrickson

Witnessed By Kurt Talbott

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	384	8.625	23#	00	384
Two	7.875	384	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

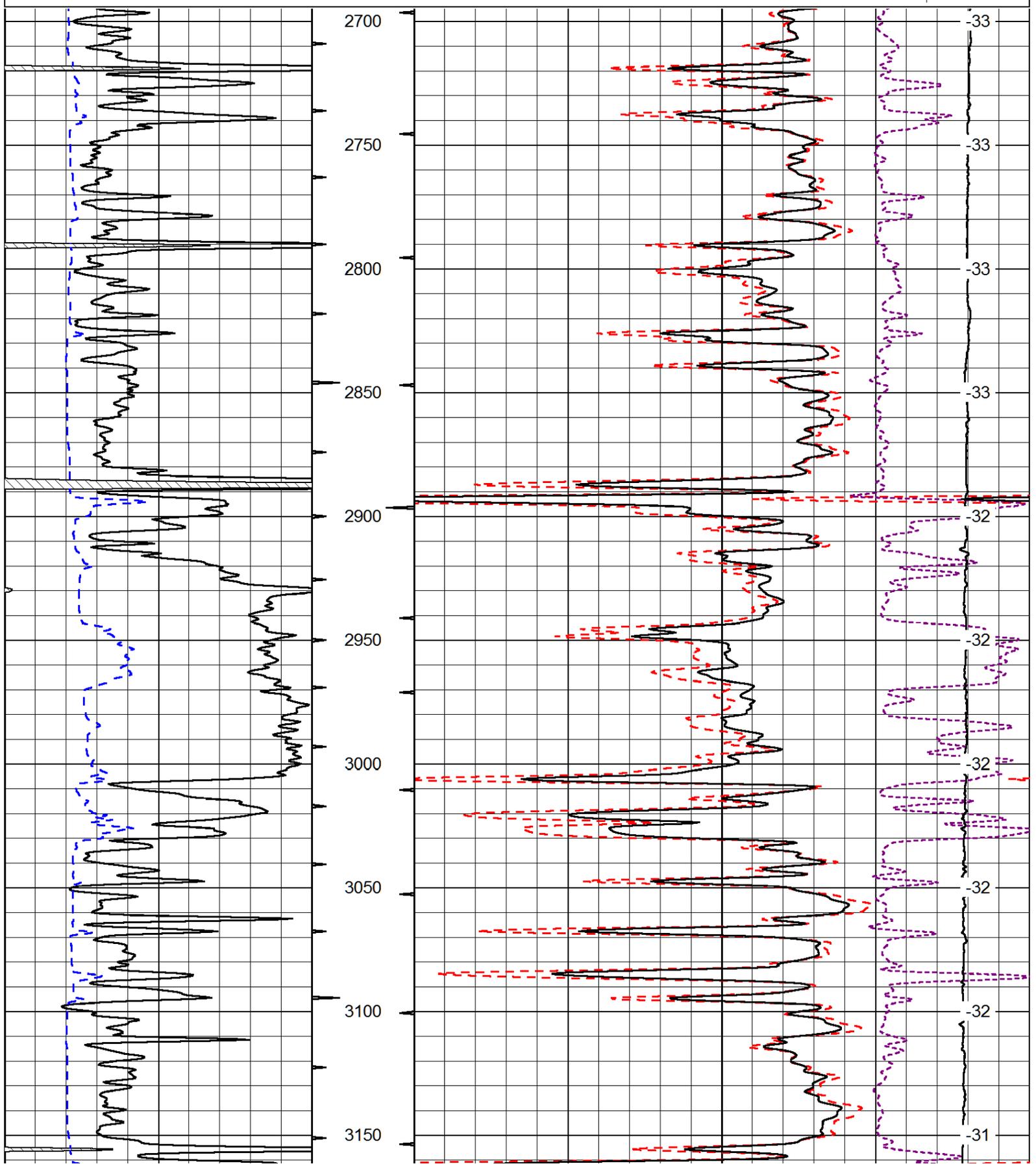
Thank you for using Log-Tech, Inc.
 (785) 625-3858

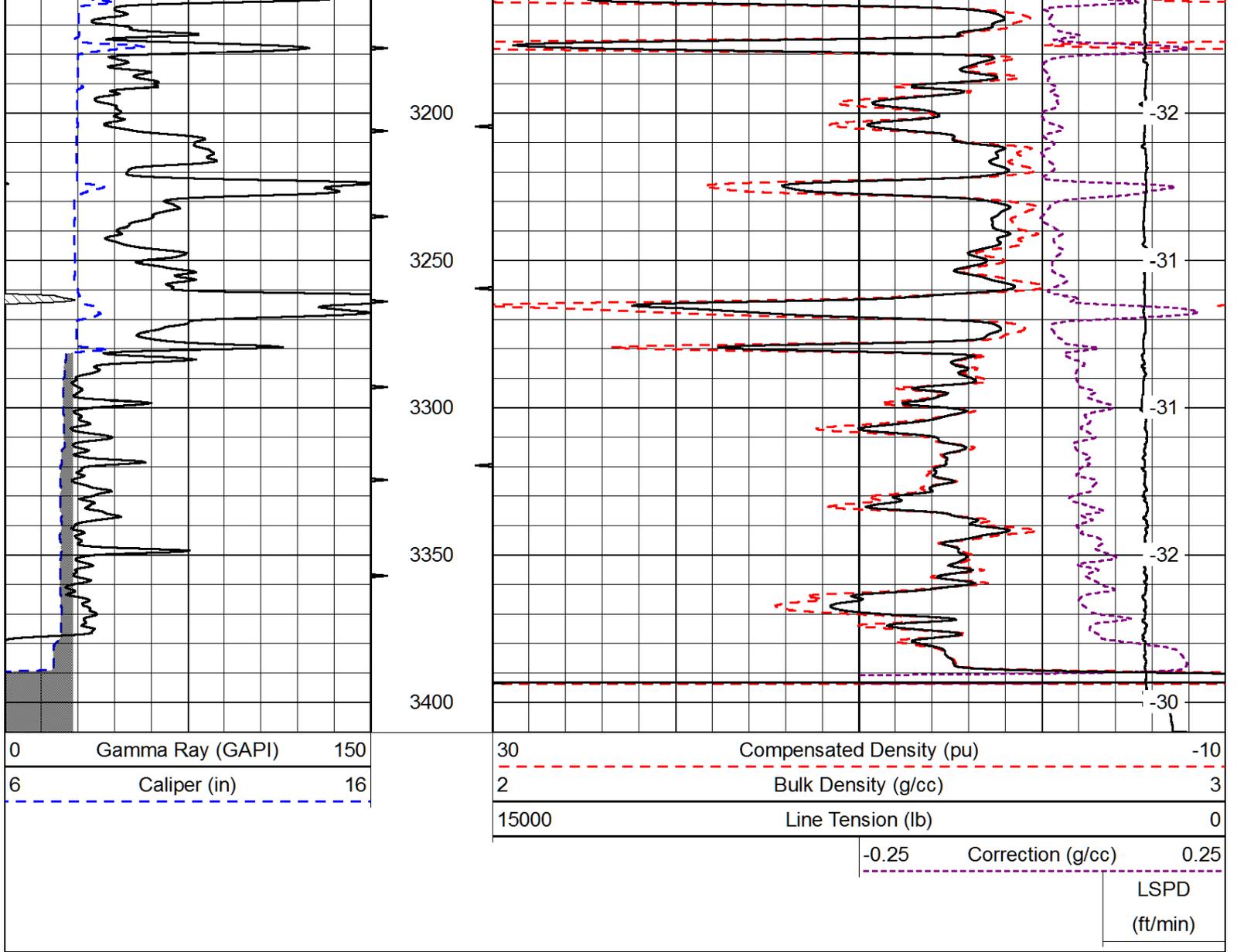
Ellinwood KS
 South on Stafford Blk Top to 50 Rd, East to 150 Rd
 1/2 North, W and N into (about 1 mile)

Database File: Id_drilling_lyle_1_14hd.db
 Dataset Pathname: DIL/ldstk
 Presentation Format: cdl
 Dataset Creation: Mon Jul 01 14:27:51 2013
 Charted by: Depth in Feet scaled 1:600

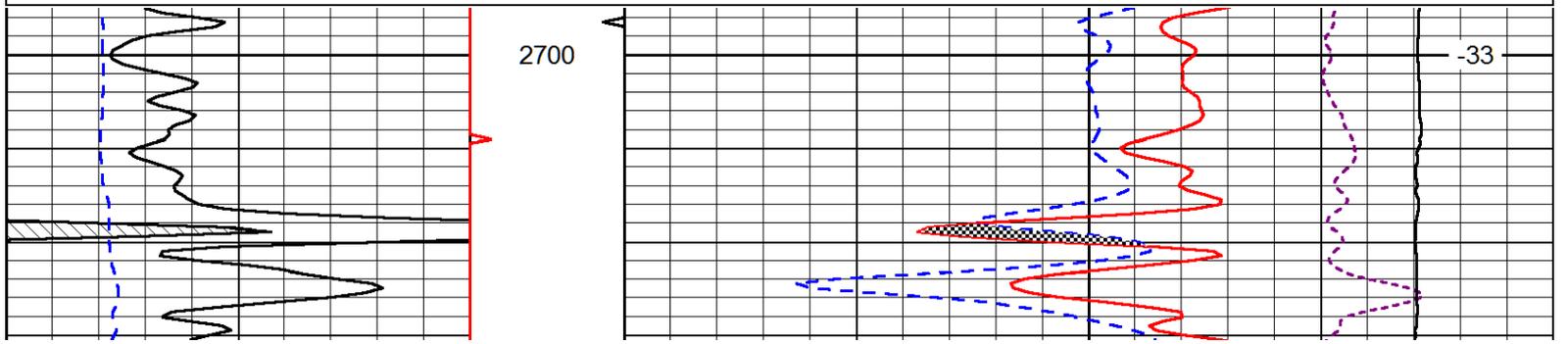
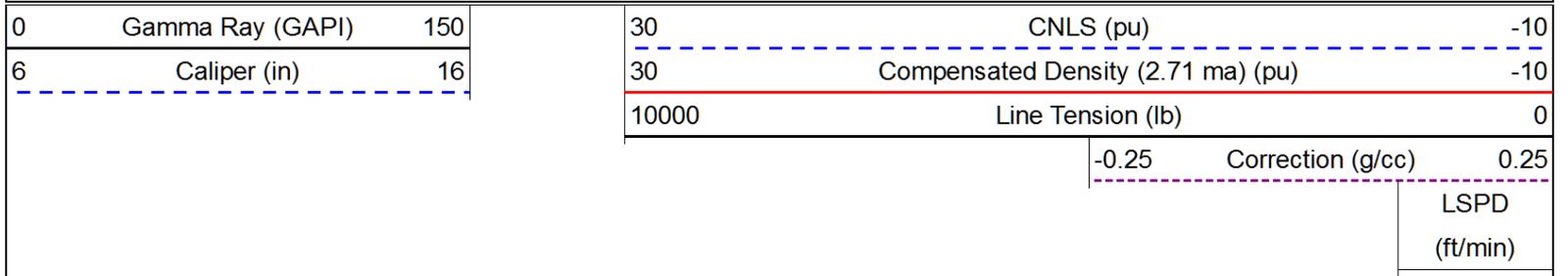
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

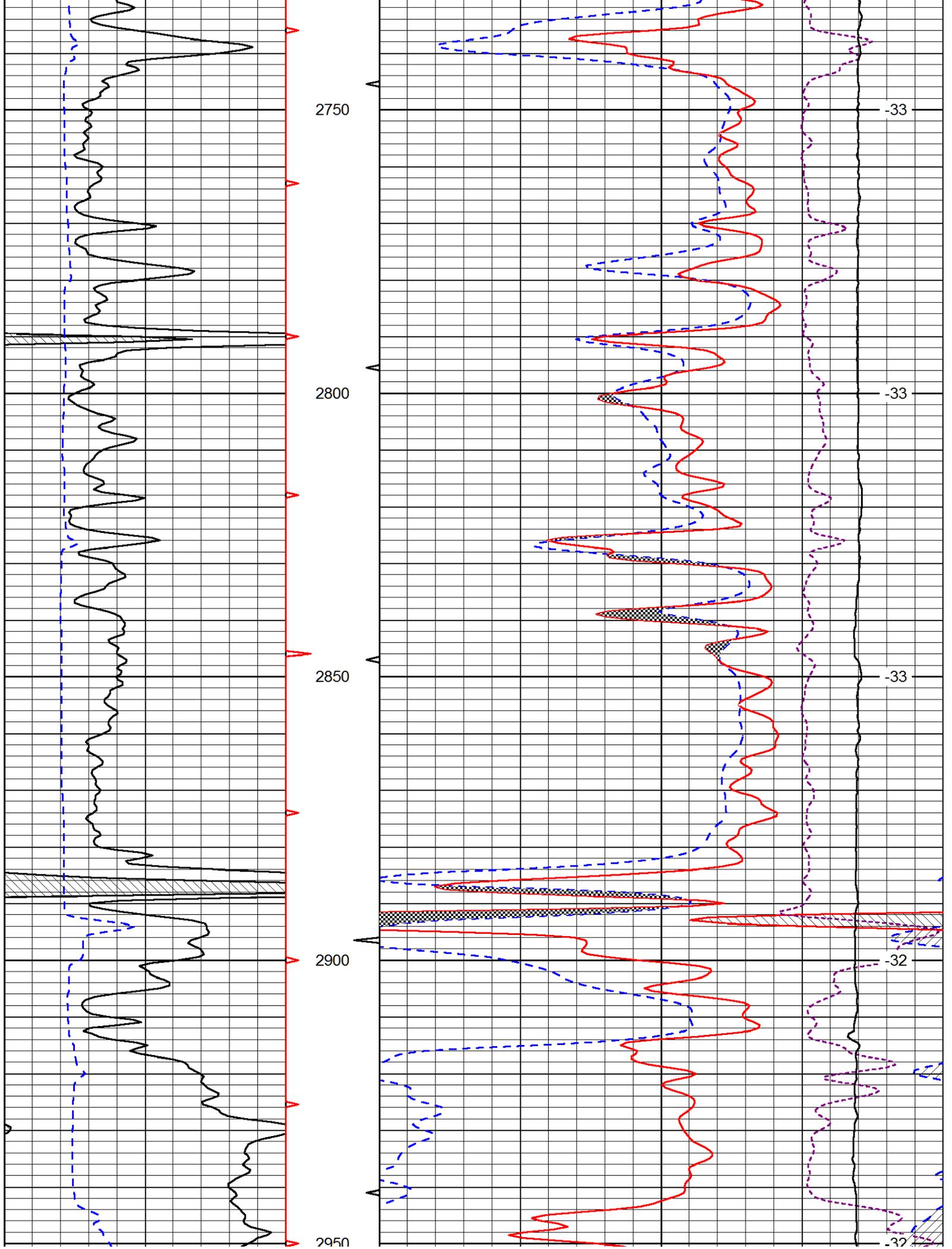
30	Compensated Density (pu)	-10
2	Bulk Density (g/cc)	3
15000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25
		LSPD (ft/min)

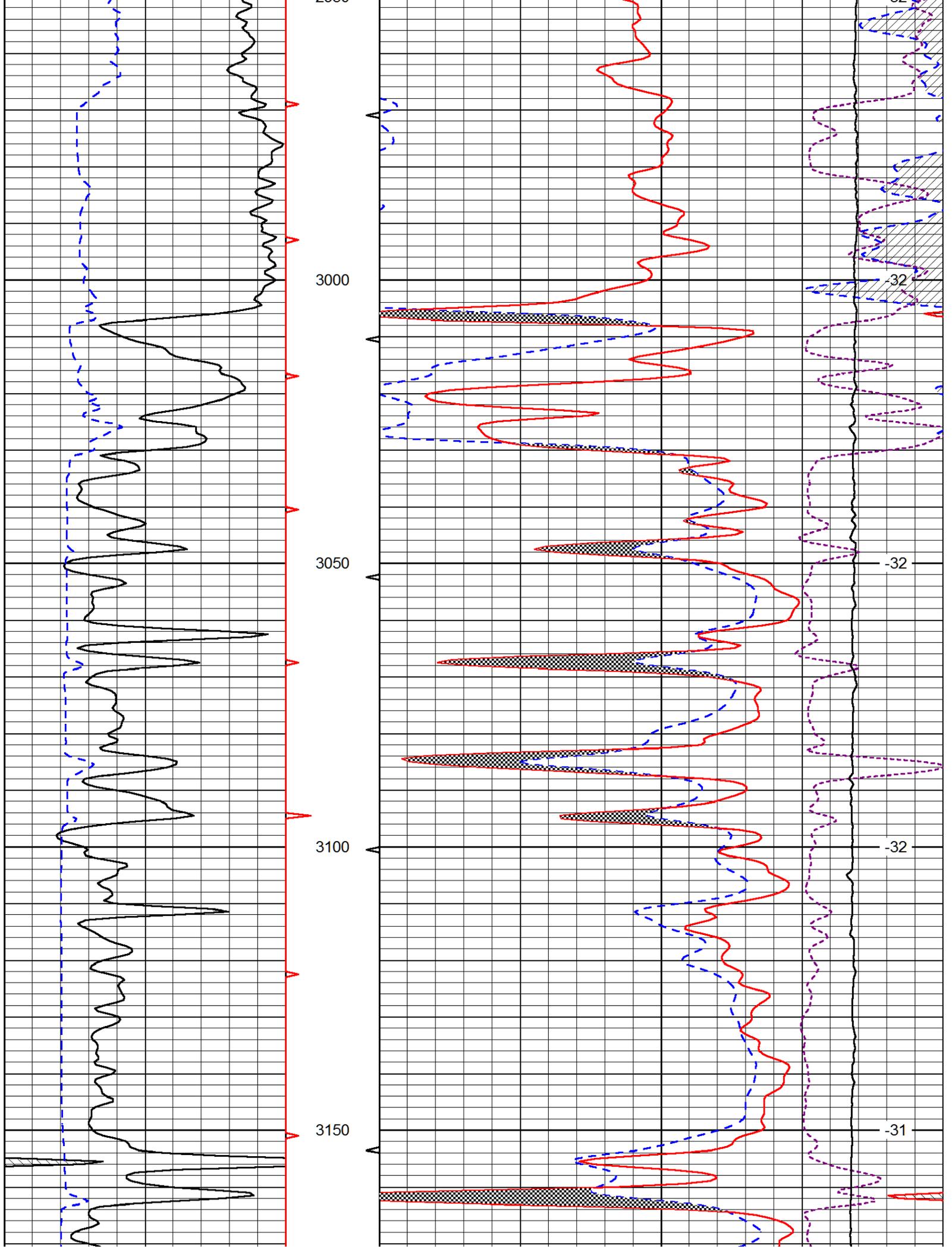


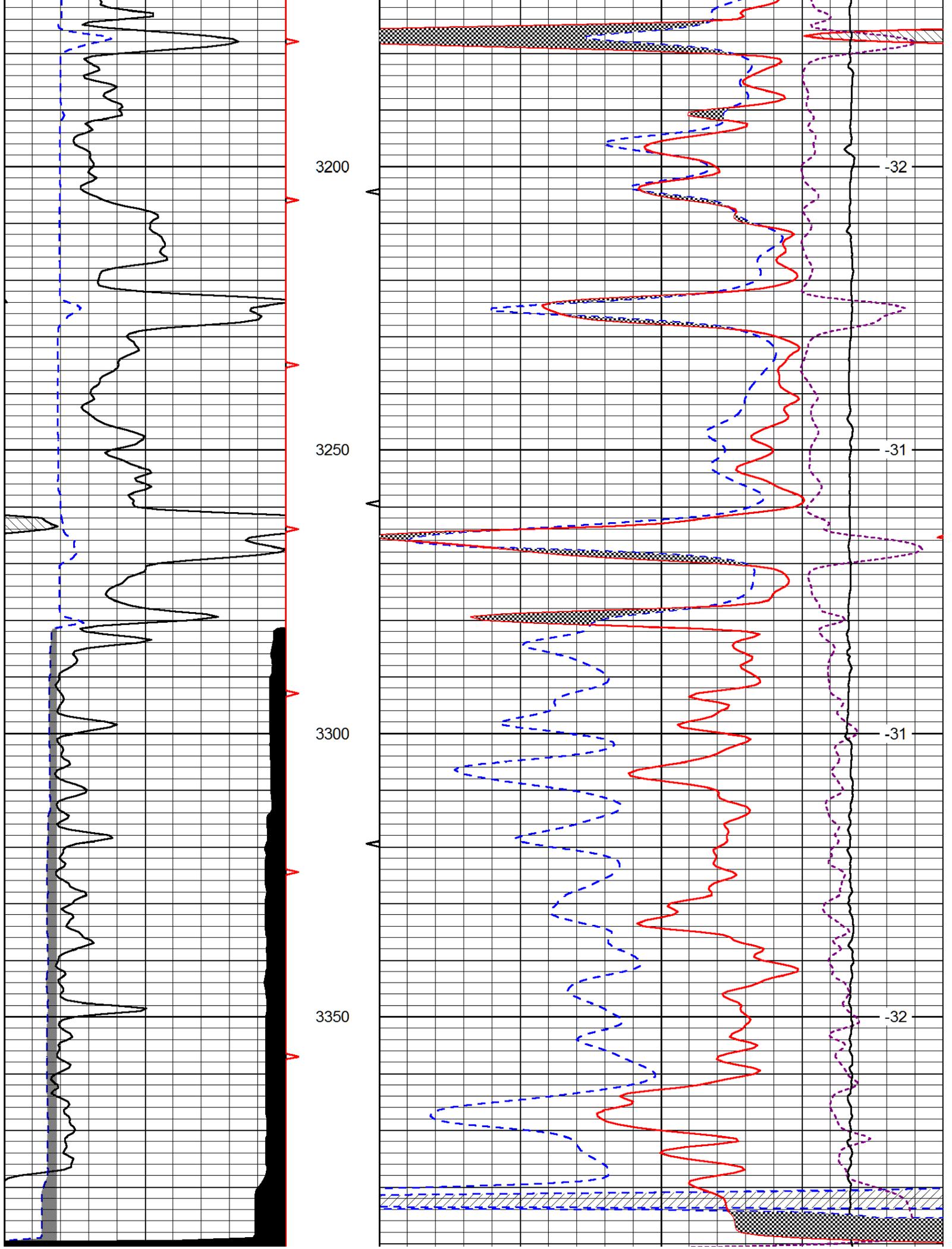


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 Presentation Format: cndlspec
 Dataset Creation: Mon Jul 01 14:27:51 2013
 Charted by: Depth in Feet scaled 1:240

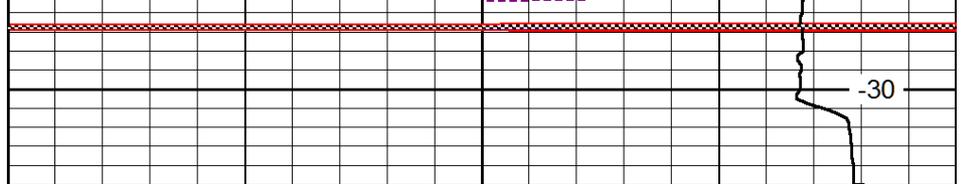








3400



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

30	CNLS (pu)	-10
30	Compensated Density (2.71 ma) (pu)	-10
10000	Line Tension (lb)	0

-0.25	Correction (g/cc)	0.25
LSPD (ft/min)		



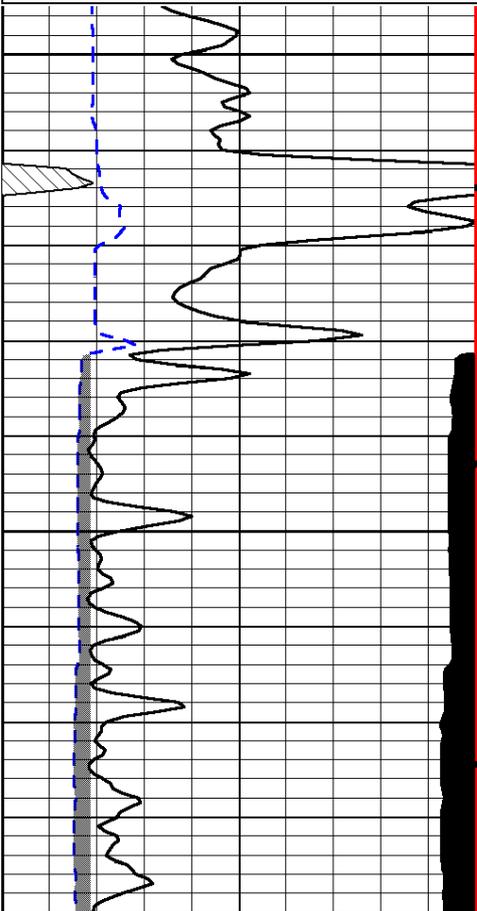
Dolomite Matrix (2.83)

Database File: Id_drilling_lyle_1_14hd.db
 Dataset Pathname: DIL/iddolo283
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 Charted by: Depth in Feet scaled 1:240

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

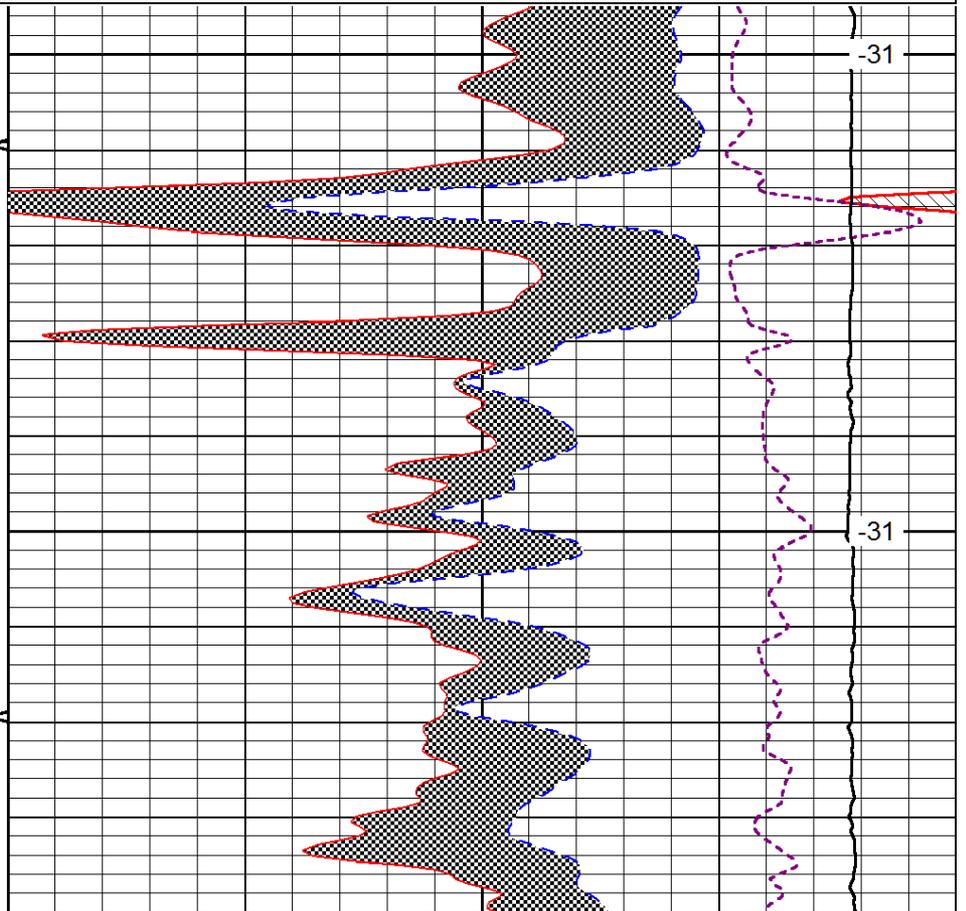
30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
15000	Line Tension (lb)	0

-0.25	Correction (g/cc)	0.25
LSPD (ft/min)		



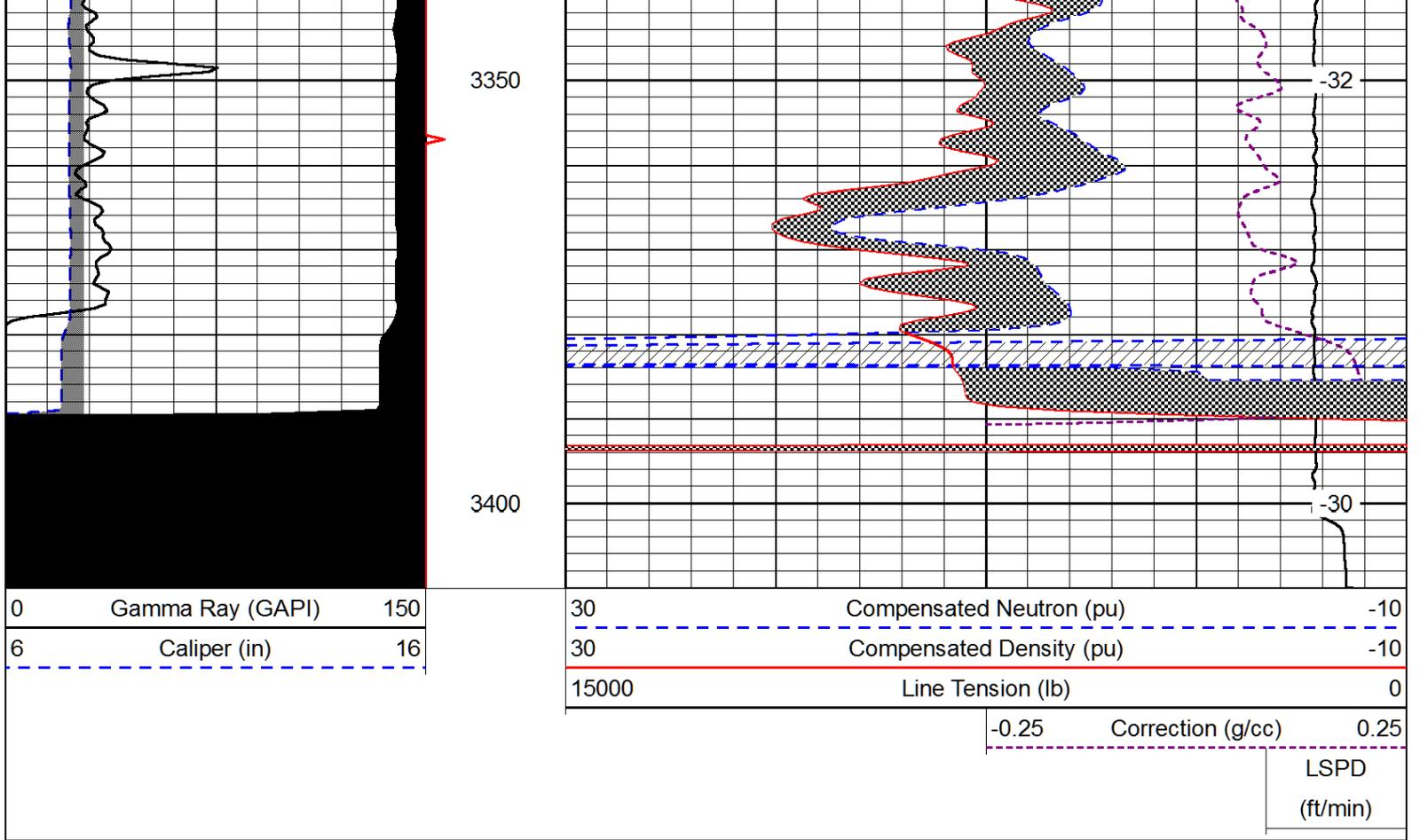
3250

3300



-31

-31





Dolomite Matrix (2.87)

Database File: Id_drilling_lyle_1_14hd.db
 Dataset Pathname: DIL/iddolo287
 Presentation Format: cndldol
 Dataset Creation: Mon Jul 01 14:29:20 2013
 Charted by: Depth in Feet scaled 1:240

