PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No. 15-147-20715-00-00

Company Bach Oil Production

Well Candy Krafft #3

Field Woodruff

County Phillips State Kansas

Location 801' FSL & 1306' FWL

Sec: 12 Twp: 1S Rge: 19W

Other Services: DIL/MEL

Permanent Datum	Ground Level	Elevation 2133	Elevation
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum	K.B. 2138
Drilling Measured From	Kelly Bushing		D.F.
			G.L. 2133

Date	8/17/2013
Run Number	One
Type Log	CNL / CDL
Depth Driller	3626
Depth Logger	3626
Bottom Logged Interval	3605
Top Logged Interval	3000
Type Fluid In Hole	Chemical
Salinity, PPM CL	500
Density	8.9
Level	Full
Max. Rec. Temp. F	114
Operating Rig Time	3 Hours
Equipment -- Location	91 Hays
Recorded By	D. Schmidt
Witnessed By	Bob Petersen

Borehole Record

Run No.	Bit	From	To
One	12.25	00	221
Two	7.875	221	TD

Casing Record

Size	Wgt.	From	To
8.625	23#	00	221

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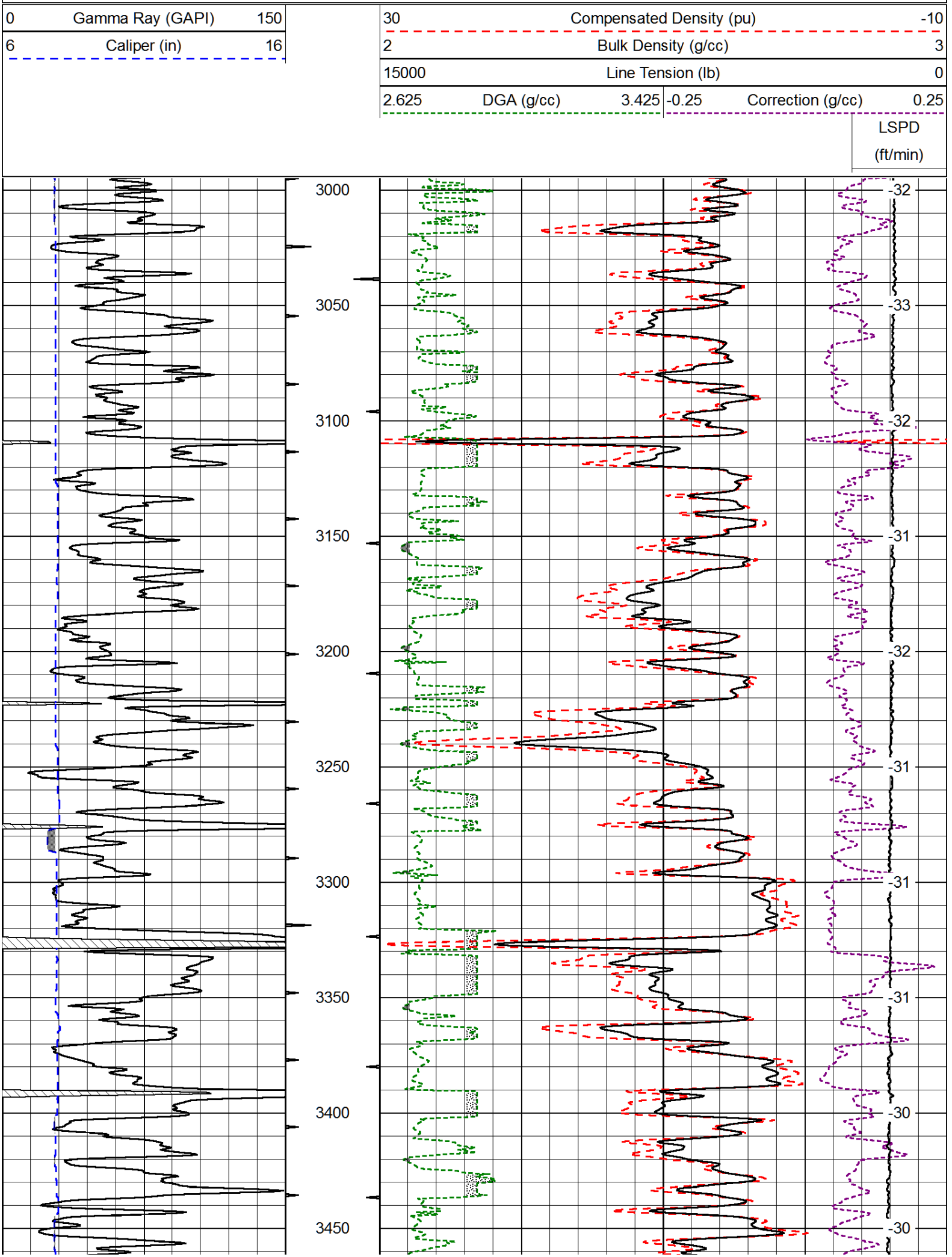
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

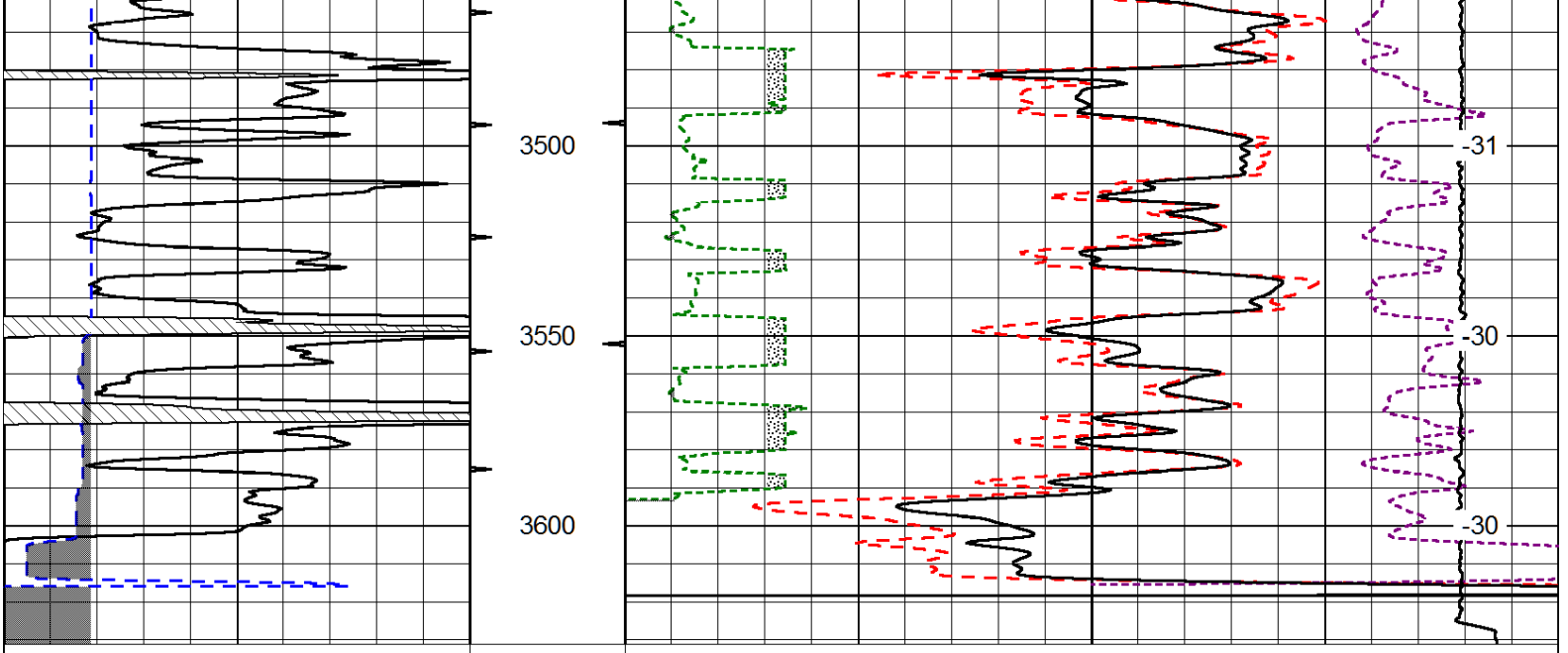
Comments

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

Phillipsburg,
North to Hwy 383, 3 West to 500 Rd, 1 1/2 South,
East & North into

Database File:	bach_081713hd.db
Dataset Pathname:	dil/bchstck
Presentation Format:	cdl
Dataset Creation:	Sat Aug 17 12:06:12 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
2.625 DGA (g/cc) 3.425
-0.25 Correction (g/cc) 0.25
LSPD (ft/min)
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
-32
-33
-32
-31
-32
-31
-31
-31
-30
-30



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

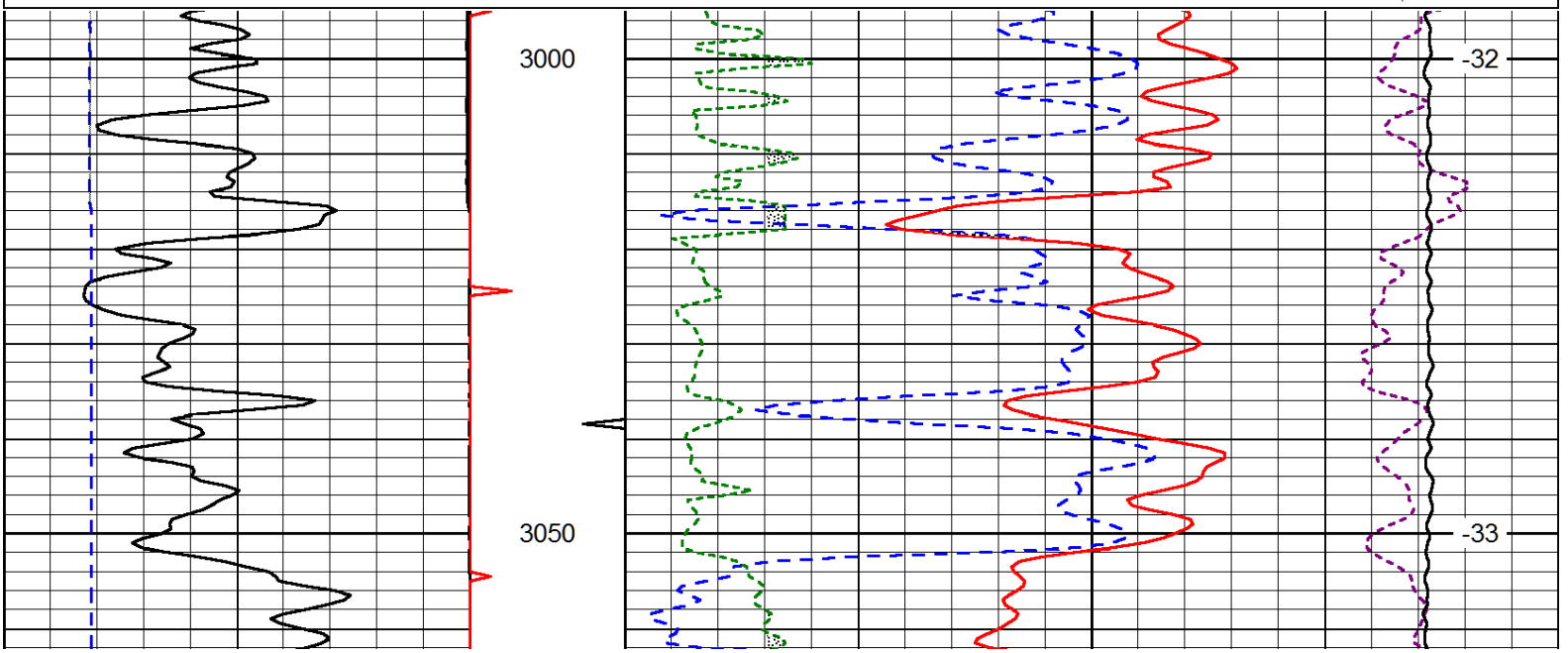
LSPD (ft/min)

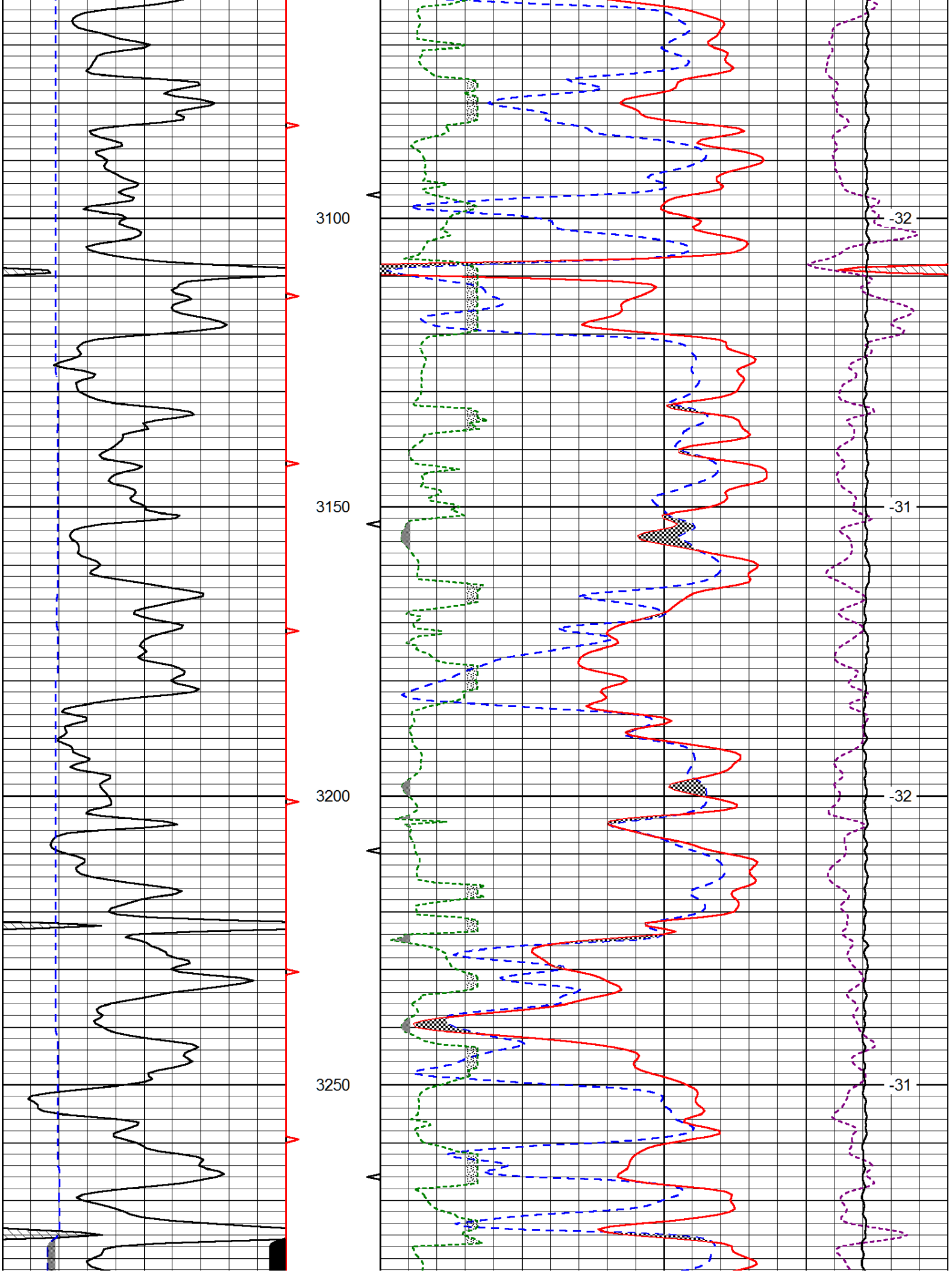
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Dataset Pathname:	dil/bchstck
Presentation Format:	cndlspec
Dataset Creation:	Sat Aug 17 12:06:12 2013
Charted by:	Depth in Feet scaled 1:240

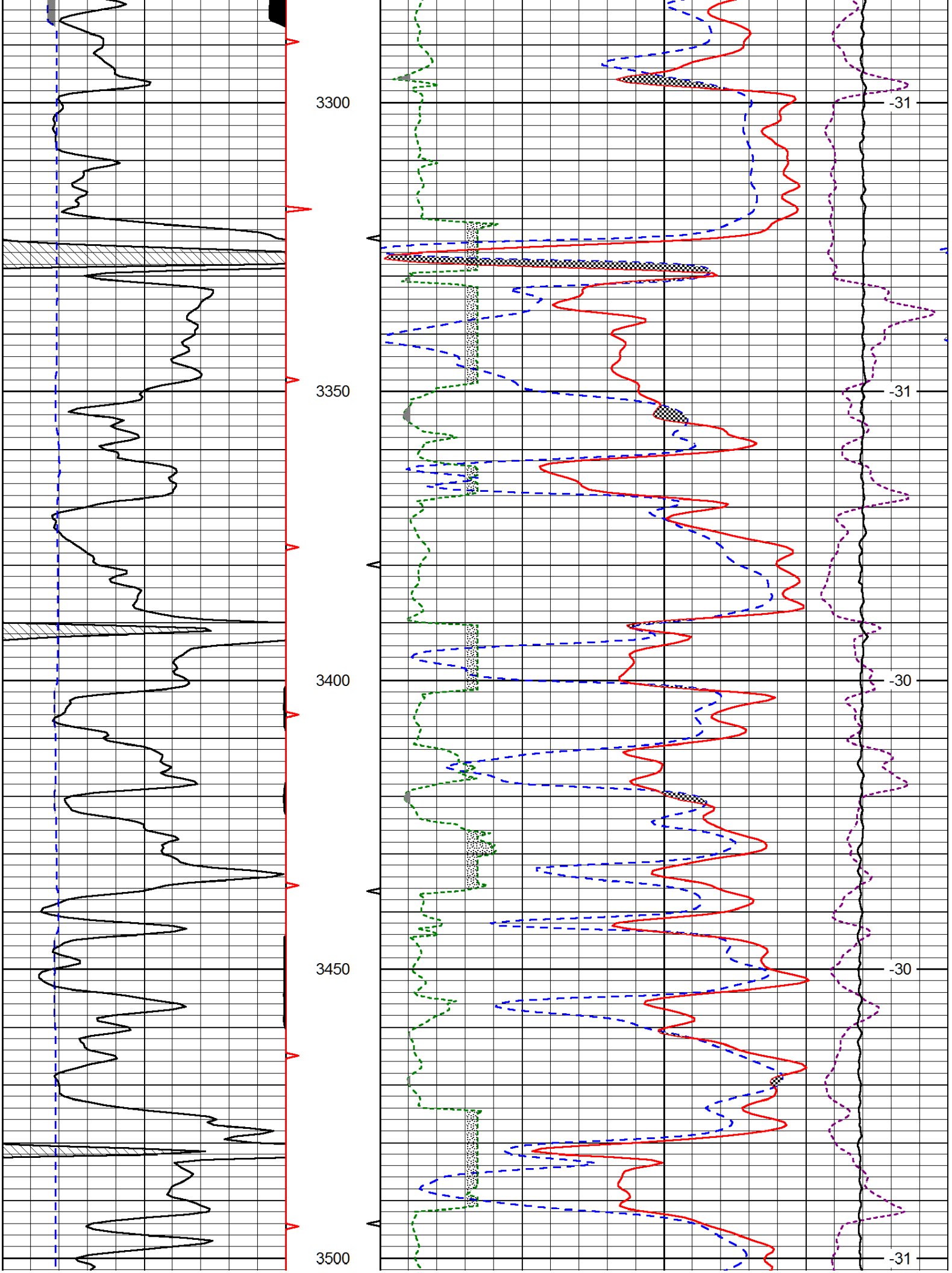
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

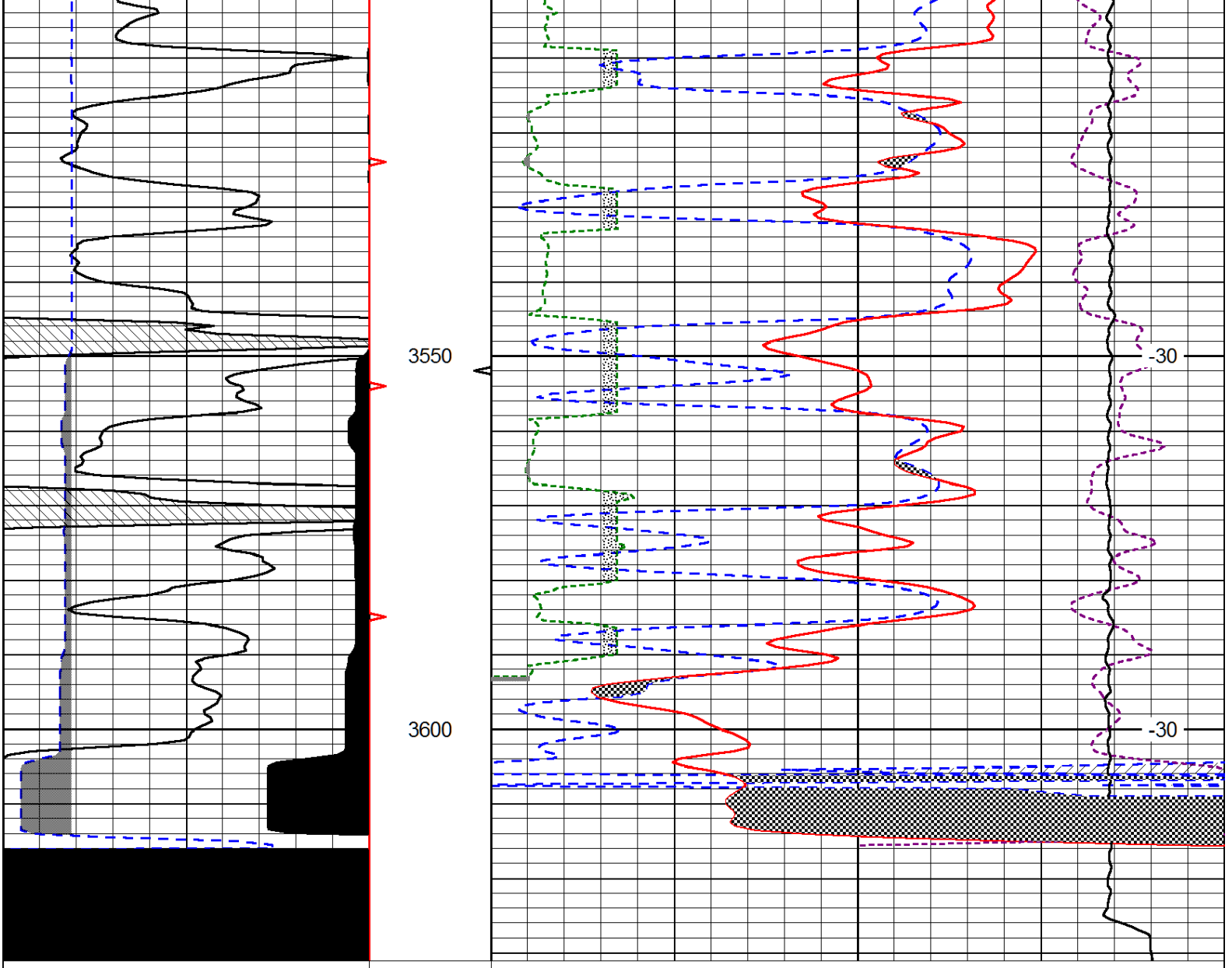
30	CNLS (pu)				-10
30	Compensated Density (2.71 ma) (pu)				-10
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
10000	Line Tension (lb)				0

LSPD (ft/min)




3100
3150
3200
3250
-32
-31
-32
-31


3300
3350
3400
3450
3500
-31
-31
-30
-30
-31



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LSPD (ft/min)