PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No. 15-147-20701-00-00

Company Bach Oil Production

Well Candy Krafft #1

Field Woodruff

County Phillips State Kansas

Location 1000' FSL & 330' FWL

Sec: 12 Twp: 1S Rge: 19W

Other Services: DIL/MEL

Elevation: K.B. 2070, D.F., G.L. 2065

Permanent Datum	Ground Level
Log Measured From	Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing
Elevation	2065
Date	2/11/2013
Run Number	One
Type Log	CNL / CDL
Depth Driller	3547
Depth Logger	3550
Bottom Logged Interval	3529
Top Logged Interval	2900
Type Fluid In Hole	Chemical
Salinity, PPM CL	400
Density	8.7
Level	Full
Max. Rec. Temp. F	113
Operating Rig Time	4 Hours
Equipment -- Location	91 Hays
Recorded By	D. Schmidt
Witnessed By	Bob Petersen

Borehole Record

Run No.	Bit	From	To
One	12.25	00	209
Two	7.875	209	TD

Casing Record

Size	Wgt.	From	To
8.625	23#	00	209

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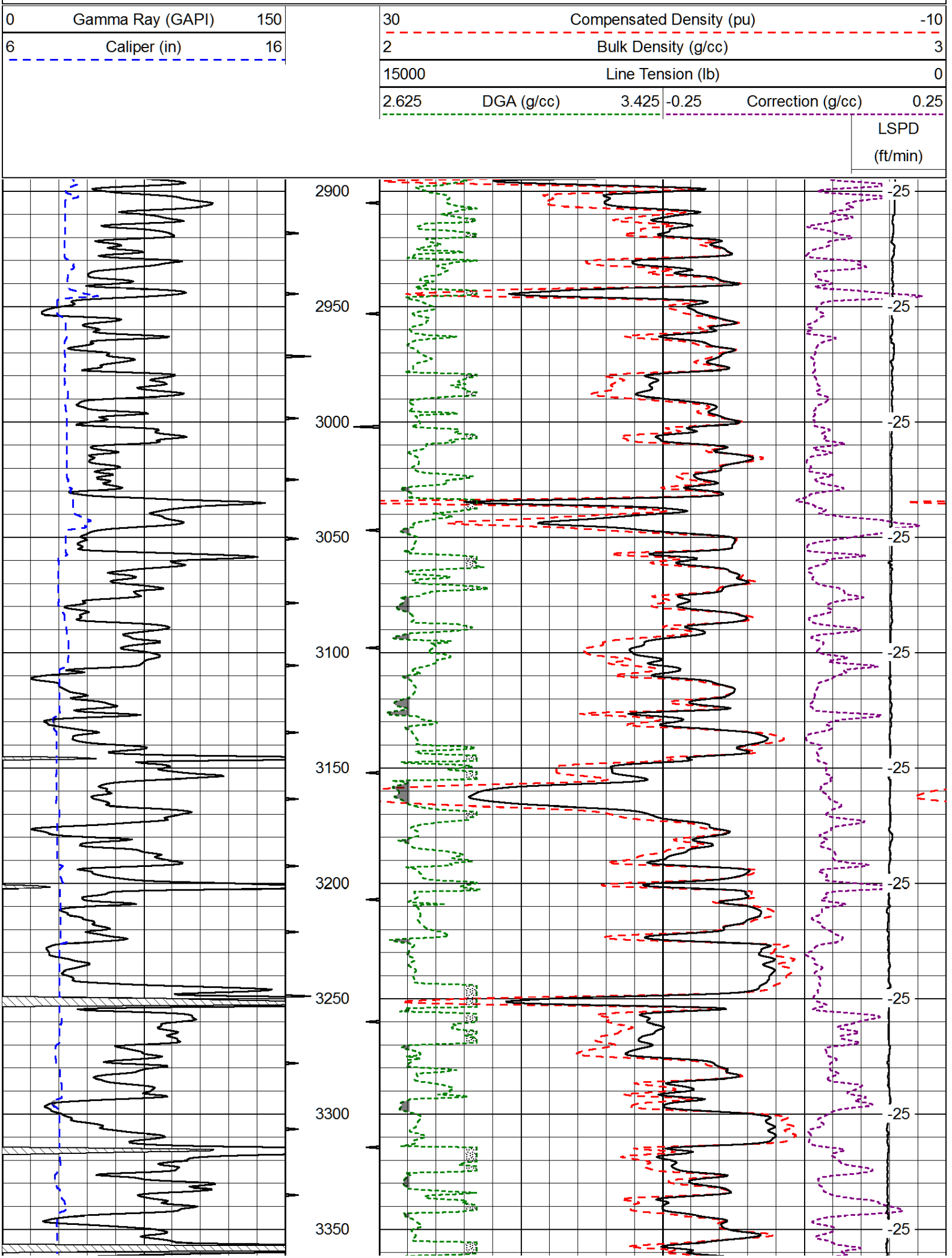
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

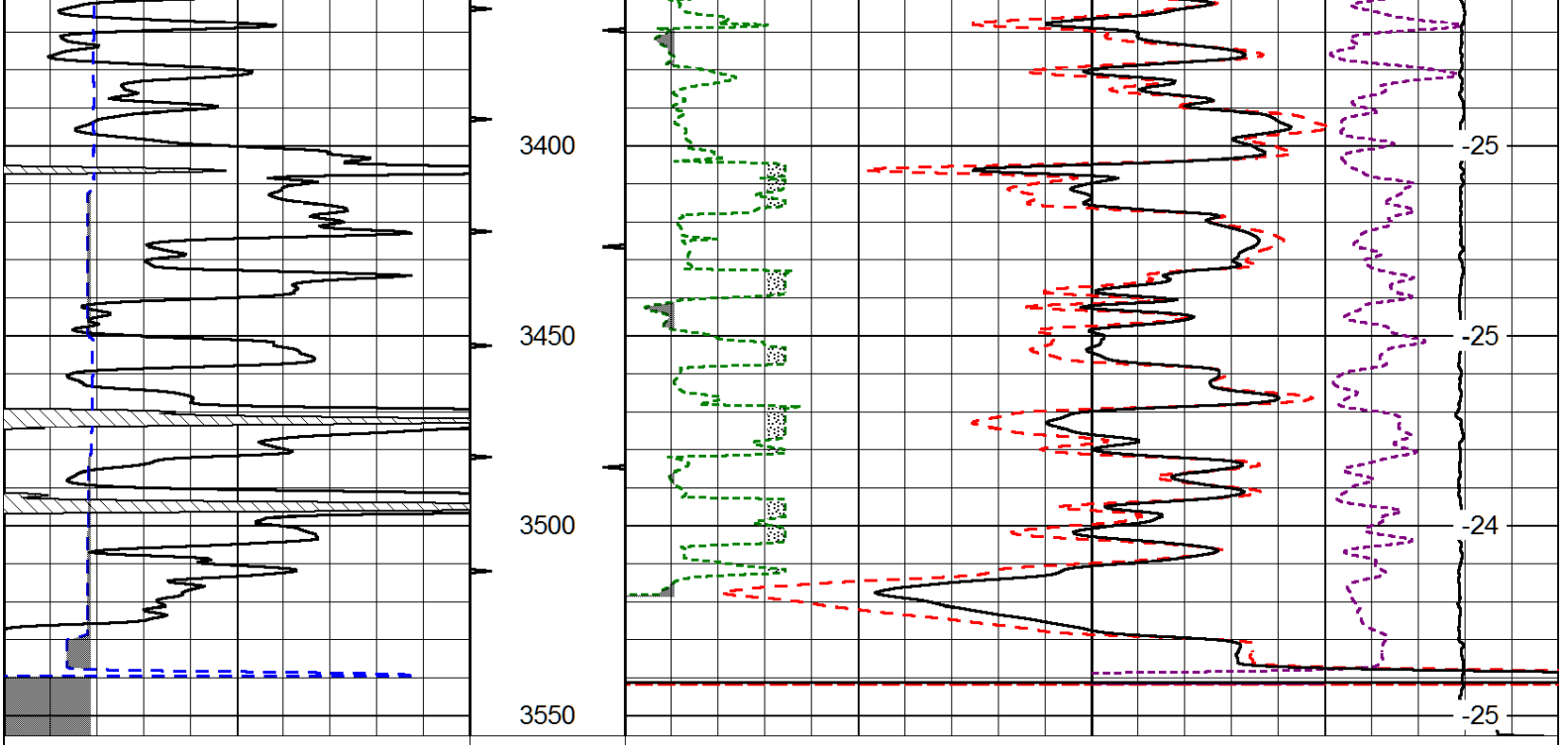
Comments

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

Phillipsburg,
North to Hwy 383, 3 West to 500th, 1 South,
East & South into

Database File:	bach_021013hd.db
Dataset Pathname:	dil/bchstck
Presentation Format:	cdl
Dataset Creation:	Mon Feb 11 09:22:41 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)
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
-25
-25
-25
-25
-25
-25
-25
-25
-25



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

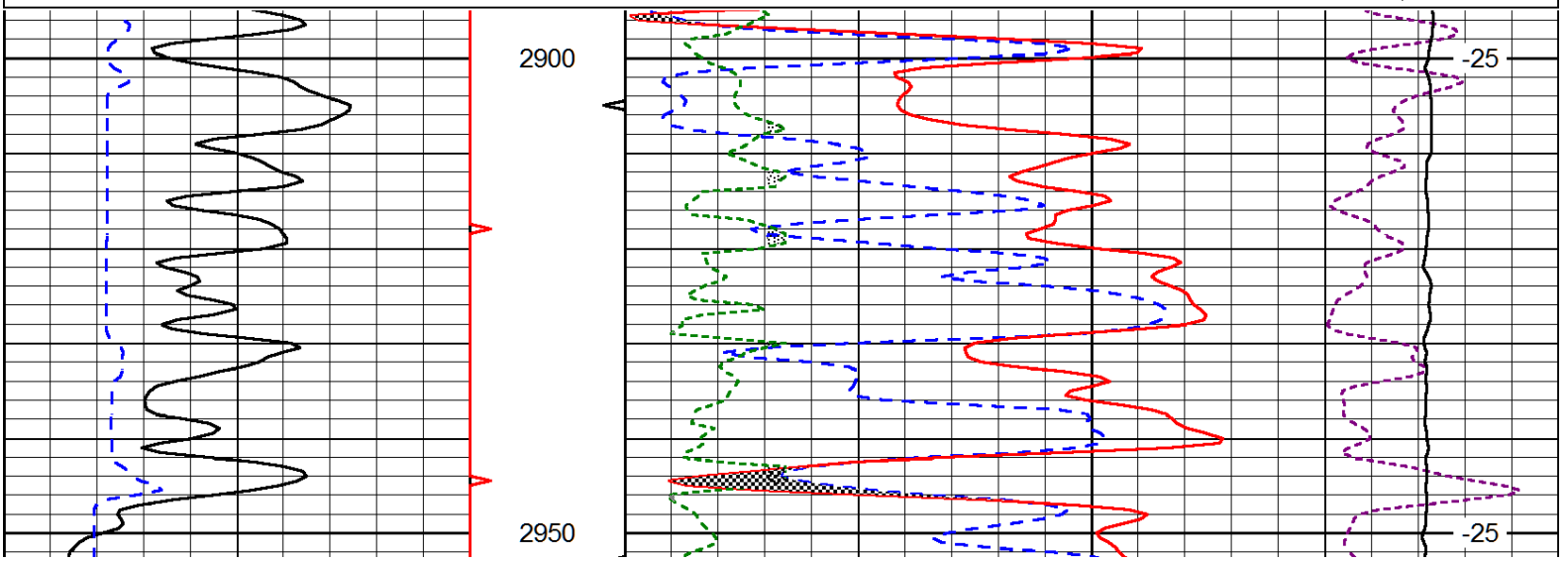
LSPD (ft/min)

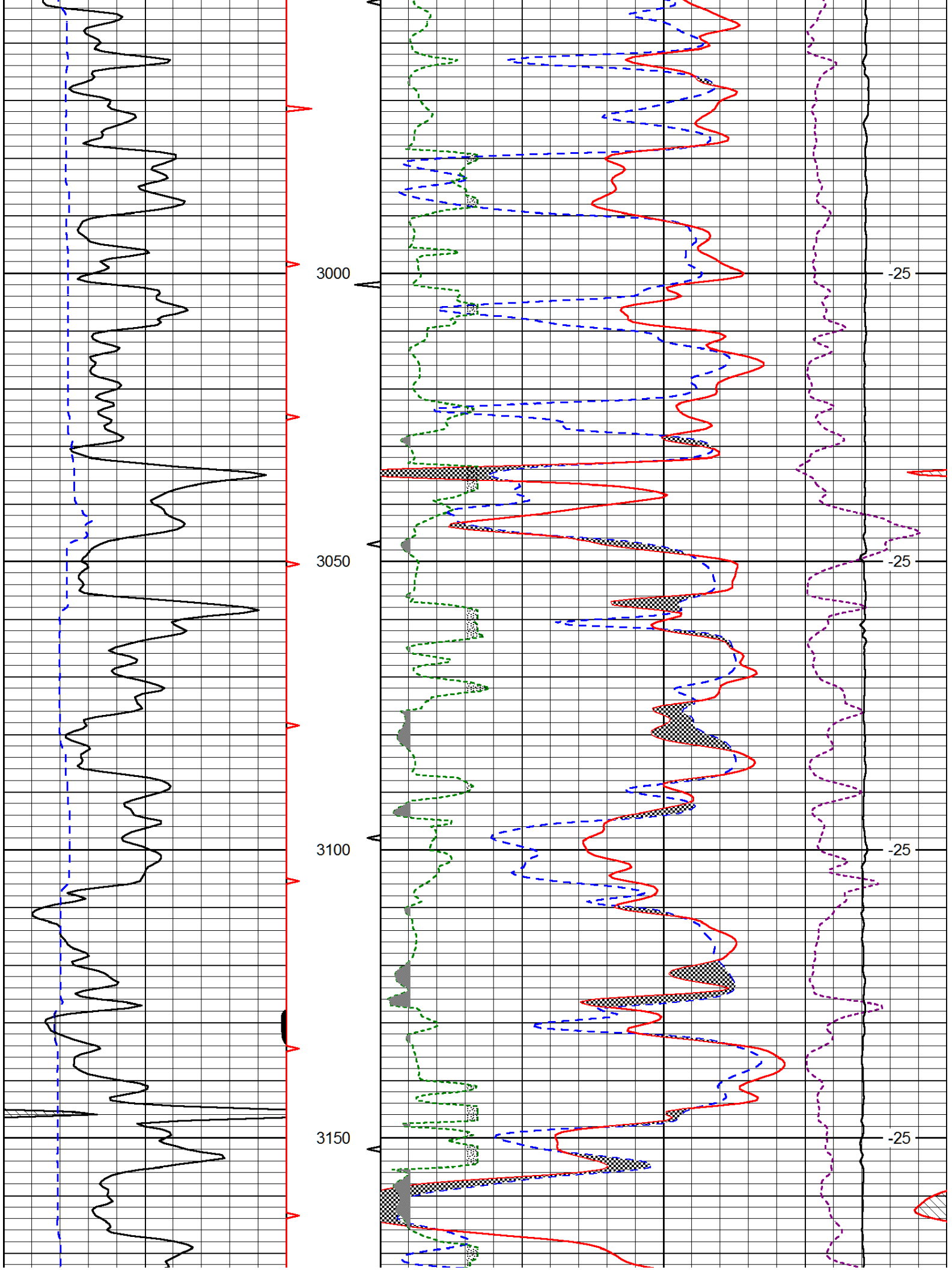
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Dataset Pathname: dil/bchstck
Presentation Format: cndlspec
Dataset Creation: Mon Feb 11 09:22:41 2013
Charted by: Depth in Feet scaled 1:240

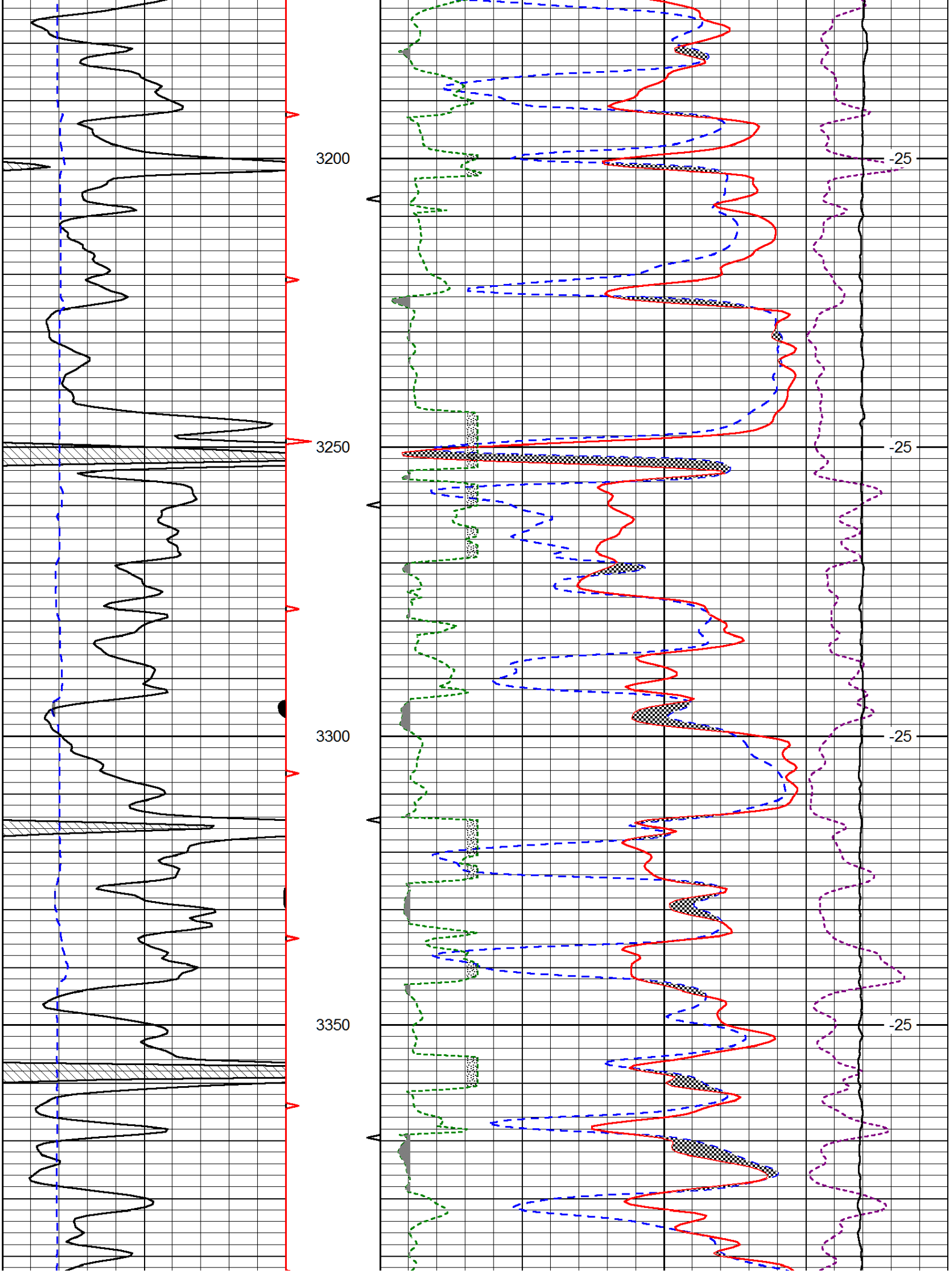
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

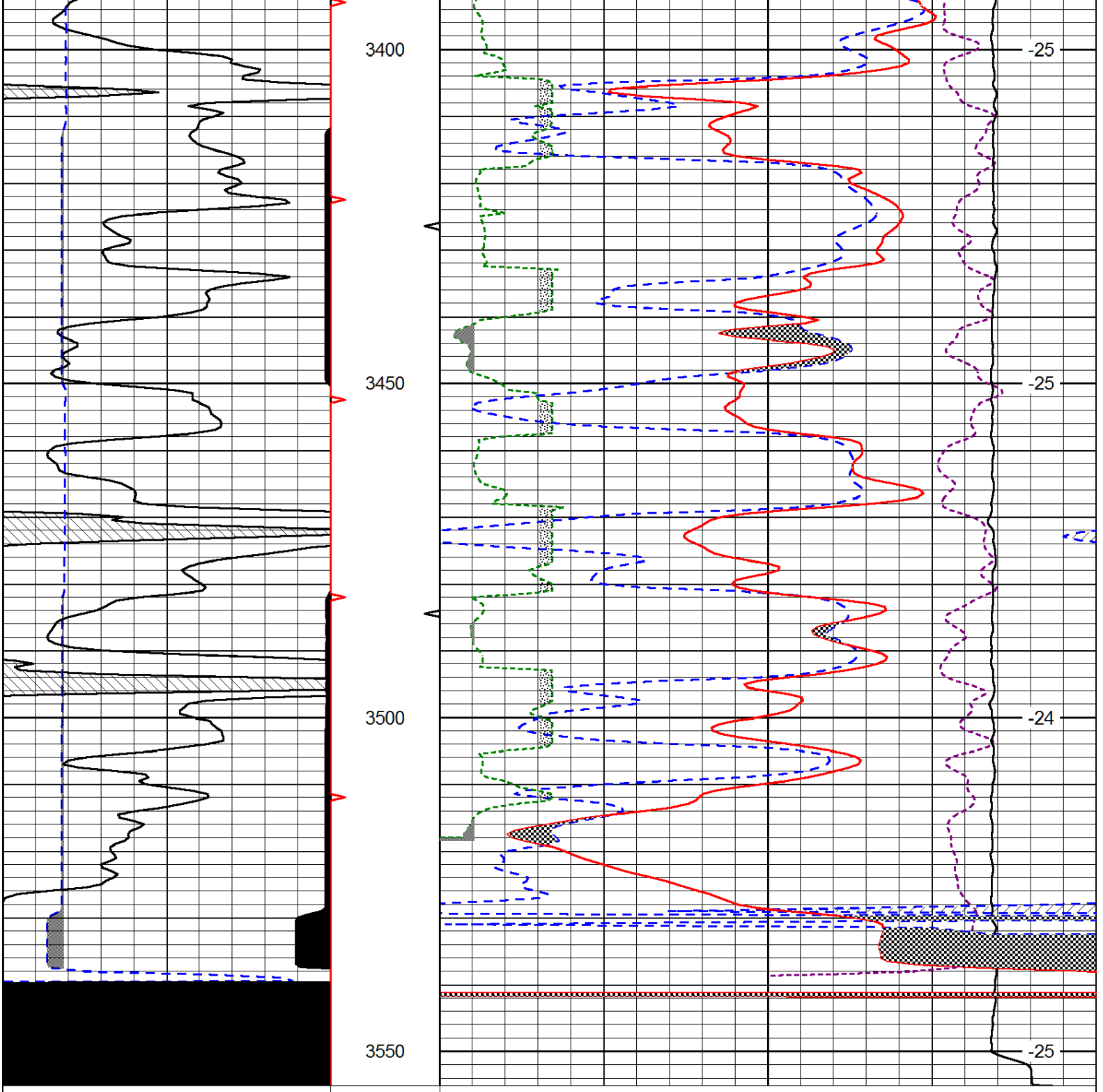
30	CNLS (pu)			-10
30	Compensated Density (2.71 ma) (pu)			-10
2.625	DGA (g/cc)	3.425	-0.25 Correction (g/cc)	0.25
10000	Line Tension (lb)			0

LSPD (ft/min)




3000
3050
3100
3150
-25
-25
-25


3200
3250
3300
3350
-25
-25
-25
-25


3400
3450
3500
3550
-25
-25
-24
-25
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)