PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No. 15-063-22152-00-00

Company H&C Oil Operating, Inc.

Well Bentley #36-3

Field Shanline Northeast

County Gove State Kansas

Location 2180' FSL & 1880' FWL

Sec: 36 Twp: 15S Rge: 28W

Other Services: DIL/MEL

Elevation: K.B. 2552, D.F., G.L. 2541

Permanent Datum	Ground Level
Log Measured From	Kelly Bushing 11 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing
Elevation	2541
Date	11/21/2013
Run Number	One
Type Log	CNL / CDL
Depth Driller	4450
Depth Logger	4451
Bottom Logged Interval	4430
Top Logged Interval	3600
Type Fluid In Hole	Chemical
Salinity, PPM CL	4000
Density	9.2
Level	Full
Max. Rec. Temp. F	123
Operating Rig Time	4 Hours
Equipment -- Location	91 Hays
Recorded By	D. Schmidt
Witnessed By	Marc Downing

Borehole Record

Run No.	Bit	From	To
One	12.25	00	265
Two	7.875	265	TD

Casing Record

Size	Wgt.	From	To
8.625	23#	00	265

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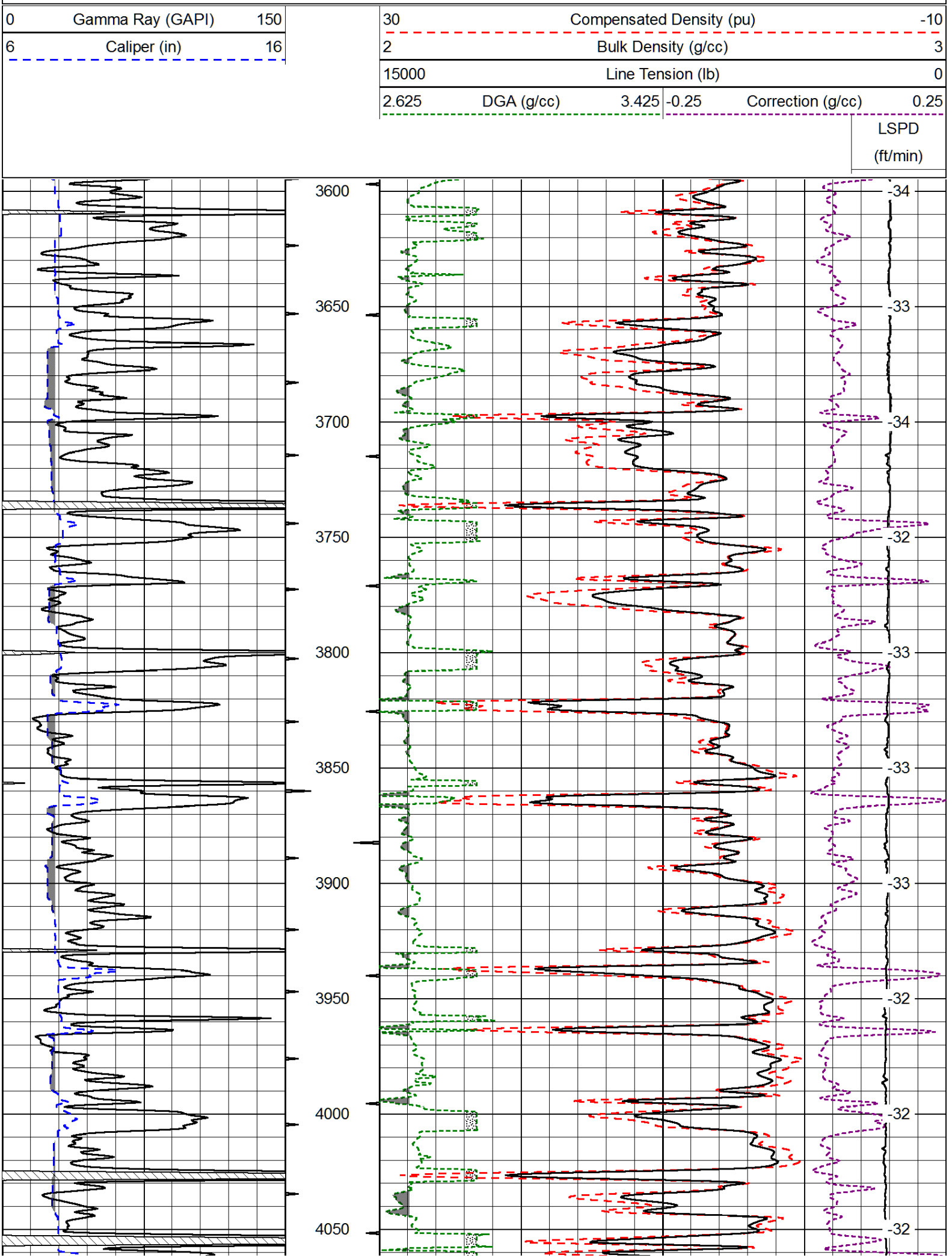
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

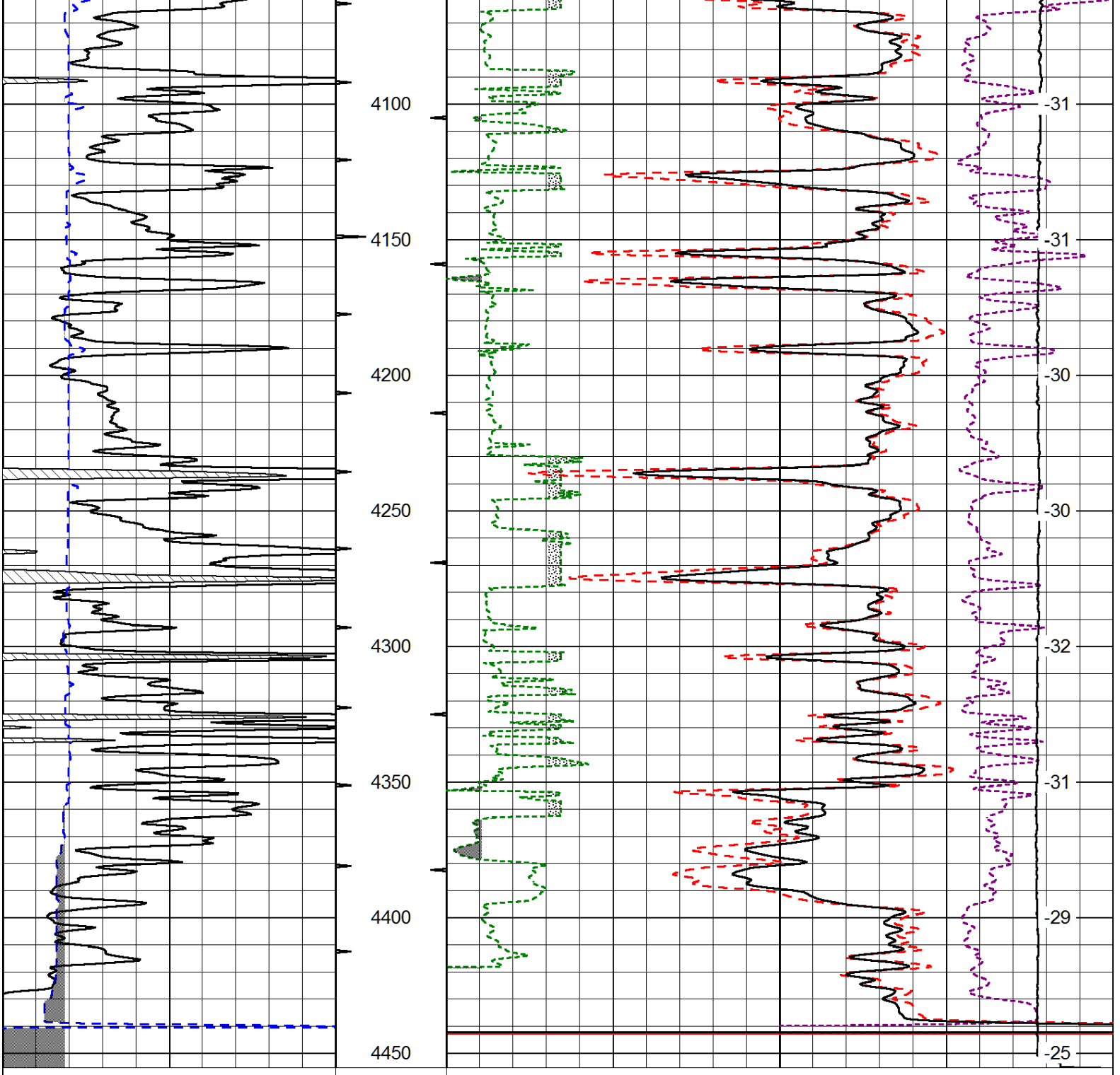
Comments

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

Pendennis,
2 West, 4 1/2 North, 3/4 West,
North into

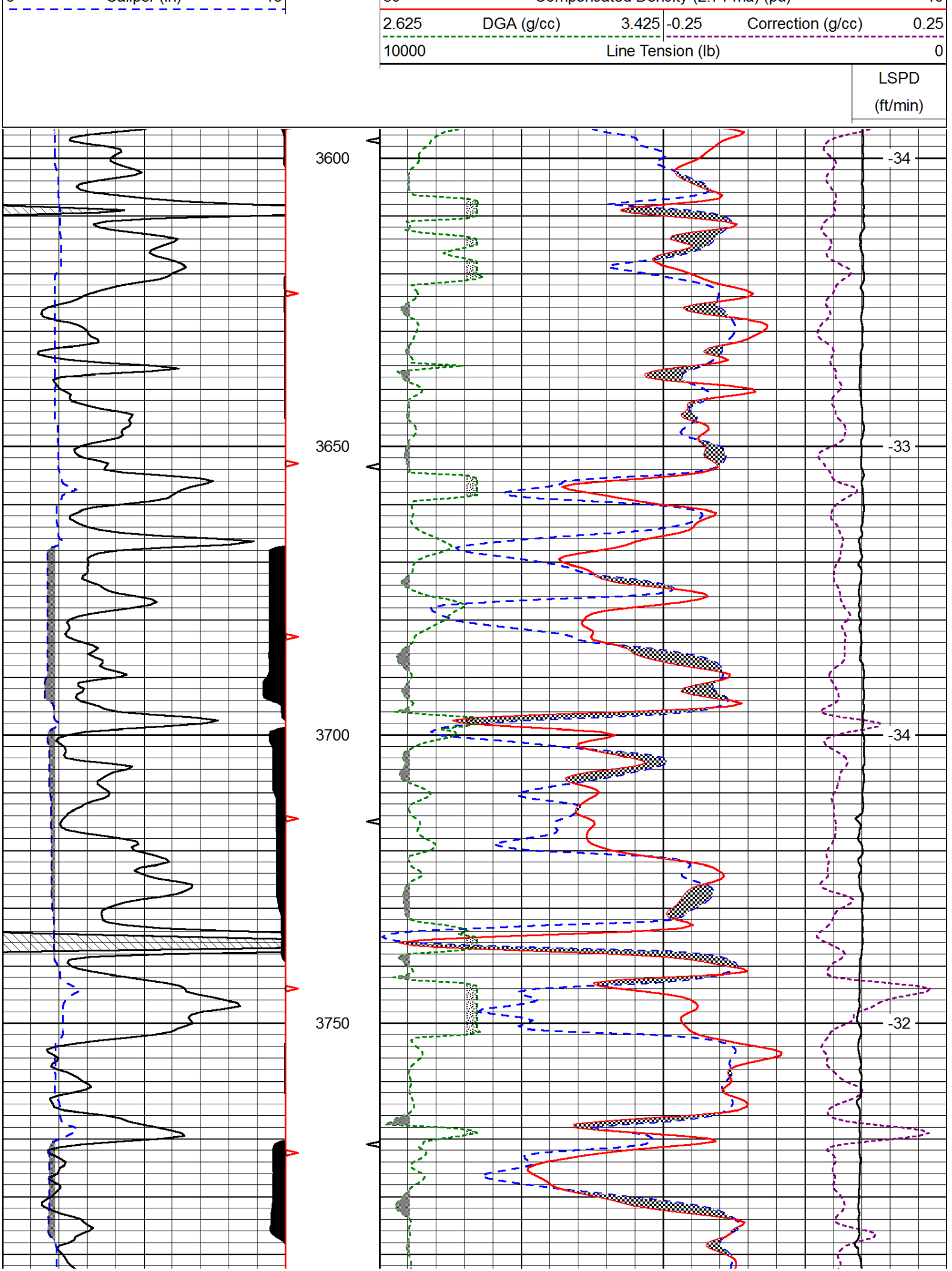
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Presentation Format:	cdl
Dataset Creation:	Thu Nov 21 14:04:57 2013
Charted by:	Depth in Feet scaled 1:600

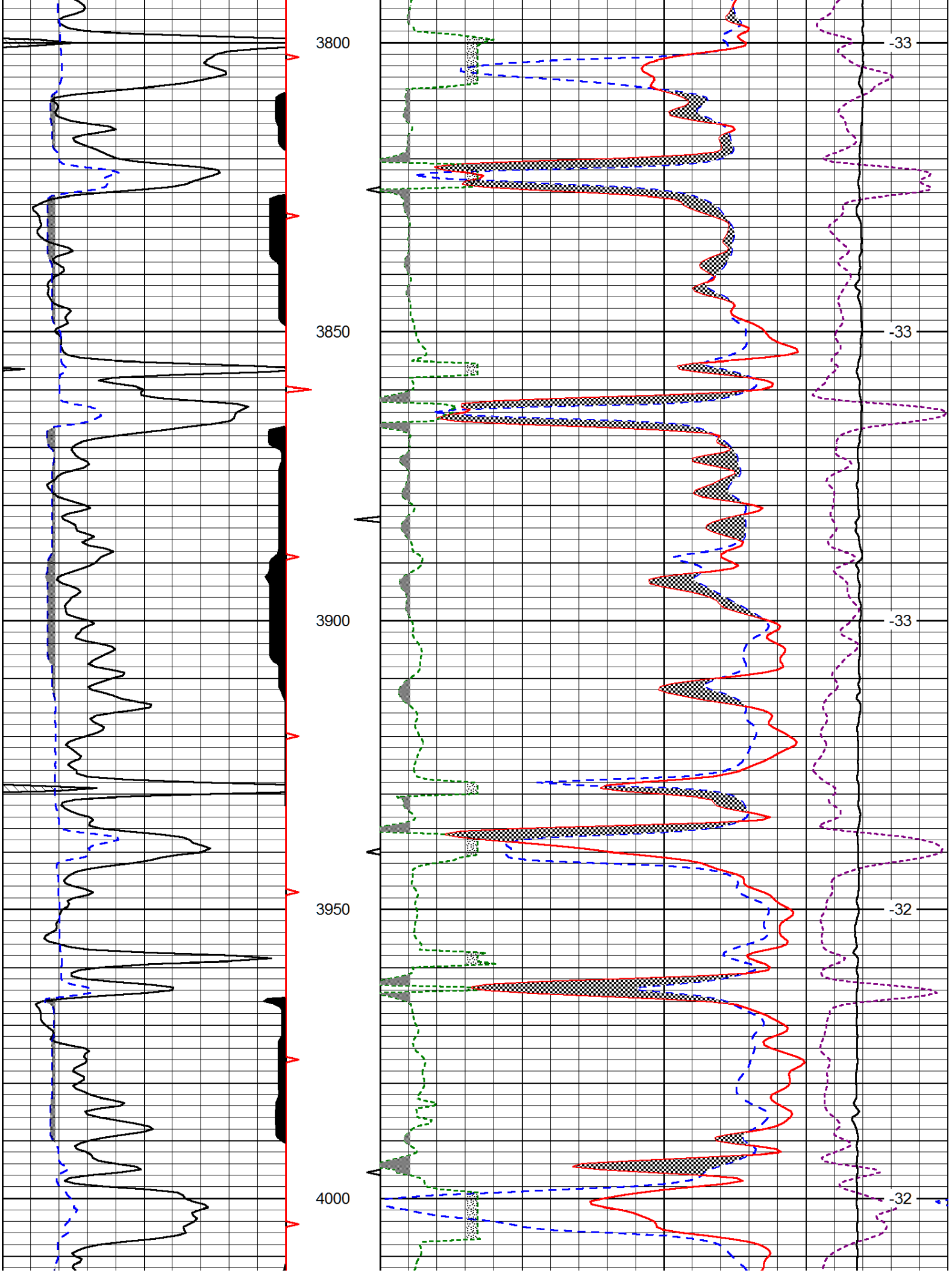

0 Gamma Ray (GAPI) 150
6 Caliper (in) 16
30 Compensated Density (pu) -10
2 Bulk Density (g/cc) 3
15000 Line Tension (lb) 0
2.625 DGA (g/cc) 3.425
-0.25 Correction (g/cc) 0.25
LSPD (ft/min)
3600
3650
3700
3750
3800
3850
3900
3950
4000
4050
-34
-33
-34
-32
-33
-33
-33
-32
-32
-32

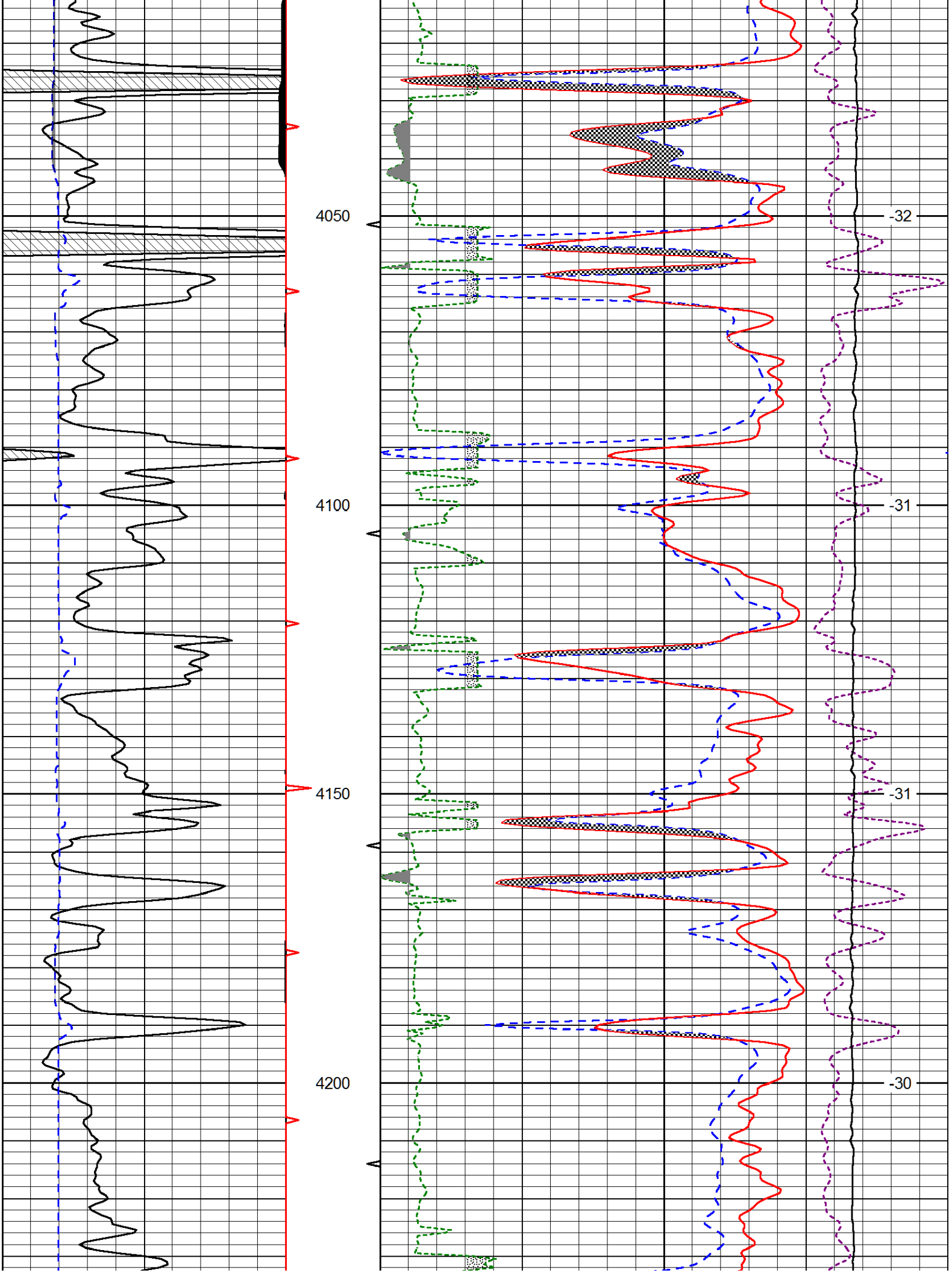


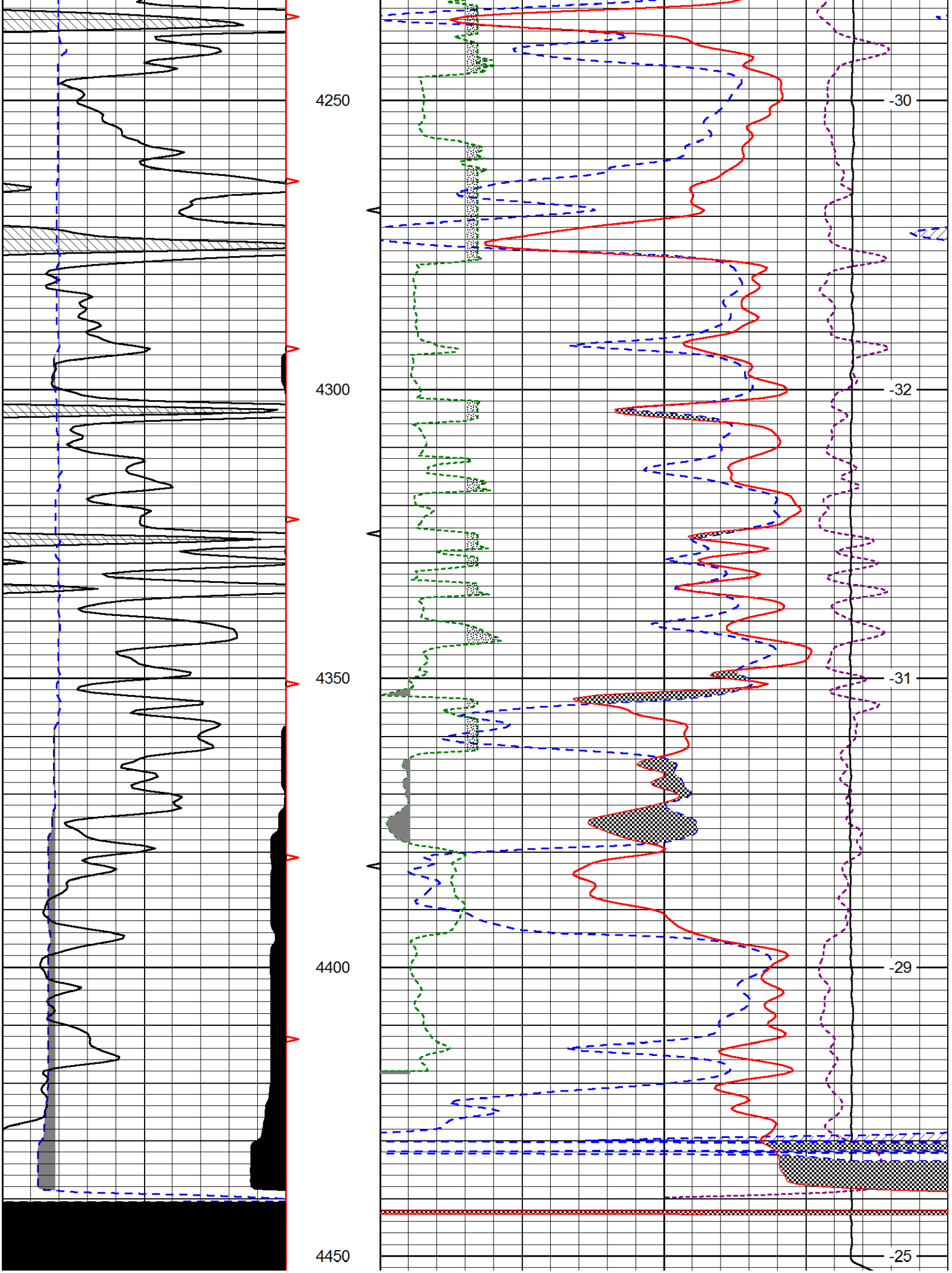
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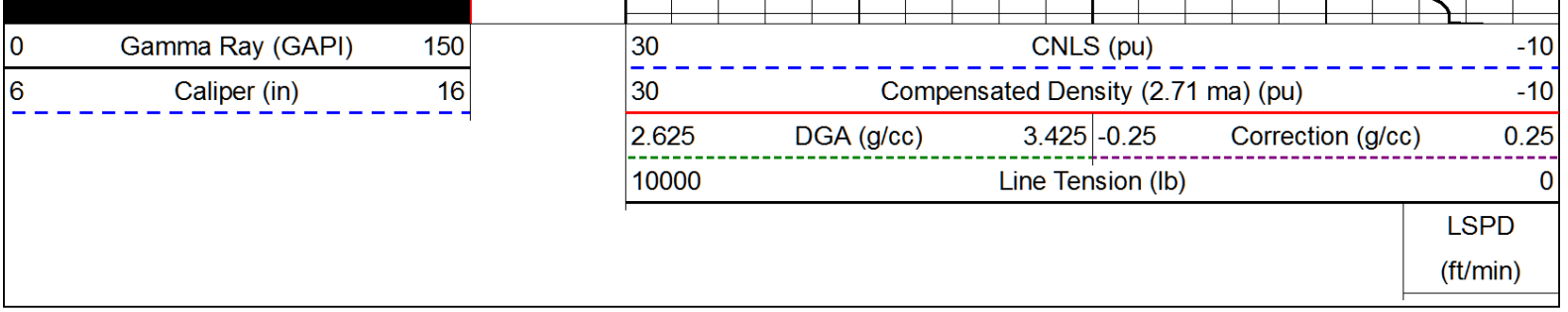
0	Gamma Ray (GAPI)	150	
6	Caliper (in)	16	
30	CNLS (pu)	-10	
30	Compensated Density (2.71 ma) (pu)	-10	


Caliper (in)
Compensated Density (2.71 mu) (pu)
2.625
DGA (g/cc)
3.425
-0.25
Correction (g/cc)
0.25
10000
Line Tension (lb)
0
LSPD
(ft/min)
3600
3650
3700
3750
-34
-33
-34
-32


3800
3850
3900
3950
4000
-33
-33
-33
-32
-32


4050
4100
4150
4200
-32
-31
-31
-30


4250
4300
4350
4400
4450
-30
-32
-31
-29
-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)