



SUPERIOR
Hays,
Kansas

COMPENSATED DENSITY/NEUTRON LOG

Company	VALHALLA EXPLORATION, LLC.		
Well	MORGENSTERN #1-2		
Field	TRAPP		
County	BARTON	State	KANSAS
Location:	API # : 15-009-25642-0000		Other Services DIL/MEL
SEC 2 TWP 17S RGE 13W		Elevation	
Permanent Datum	GROUND LEVEL	Elevation	1859
Log Measured From	KELLY BUSHING 8' A.G.L.		K.B. 1867
Drilling Measured From	KELLY BUSHING		D.F. 1865
			G.L. 1859
Date	12/8/11		
Run Number	ONE		
Depth Driller	3450		
Depth Logger	3450		
Bottom Logged Interval	3426		
Top Log Interval	2500		
Casing Driller	8 5/8" @ 773		
Casing Logger	774		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6300 PPM	
Density / Viscosity	9.3/69		
pH / Fluid Loss	11.5/7.6		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	1.5 @ 57F		
Rinf @ Meas. Temp	1.1 @ 57F		
Rinc @ Meas. Temp	1.8 @ 57F		
Source of Rinf / Rinc	MEASURED		
Rin @ BHT	.67 @ 126F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	126F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	ADAM KENNEDY		

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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 SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
HOISINGTON KS. - N. ON SUSANK BLKTOP. TO RD 160 - 3/4 W. - N. INTO

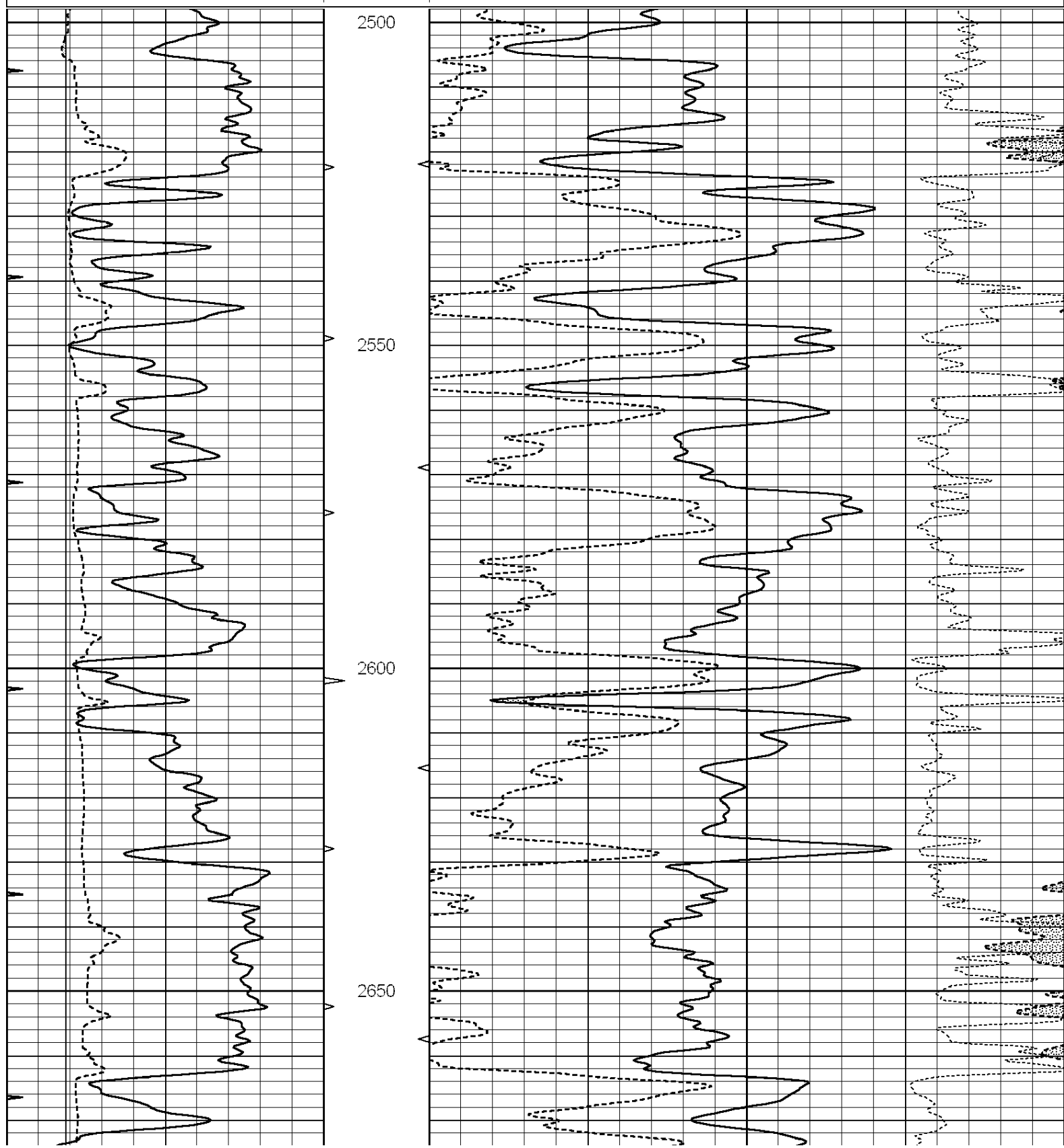


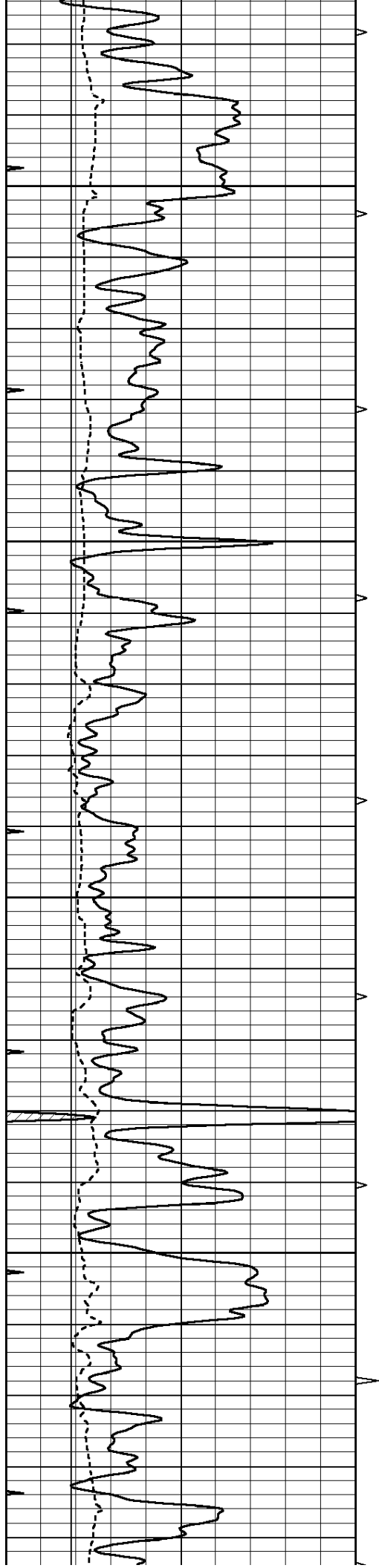
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MAIN SECTION

Database File: 008099ddn.db
Dataset Pathname: pass3.1
Presentation Format: _den_neu
Dataset Creation: Fri Dec 09 06:04:38 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		



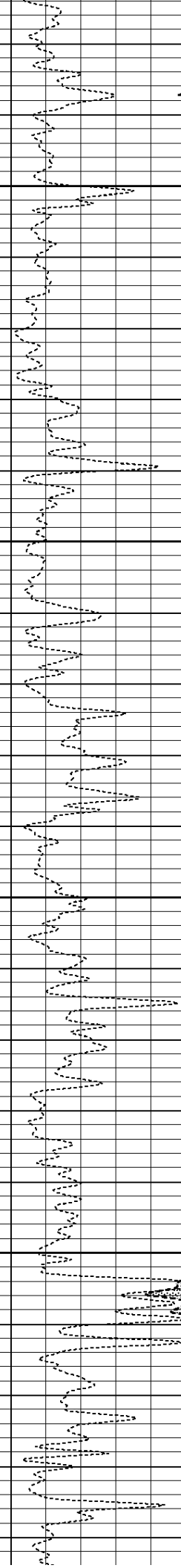
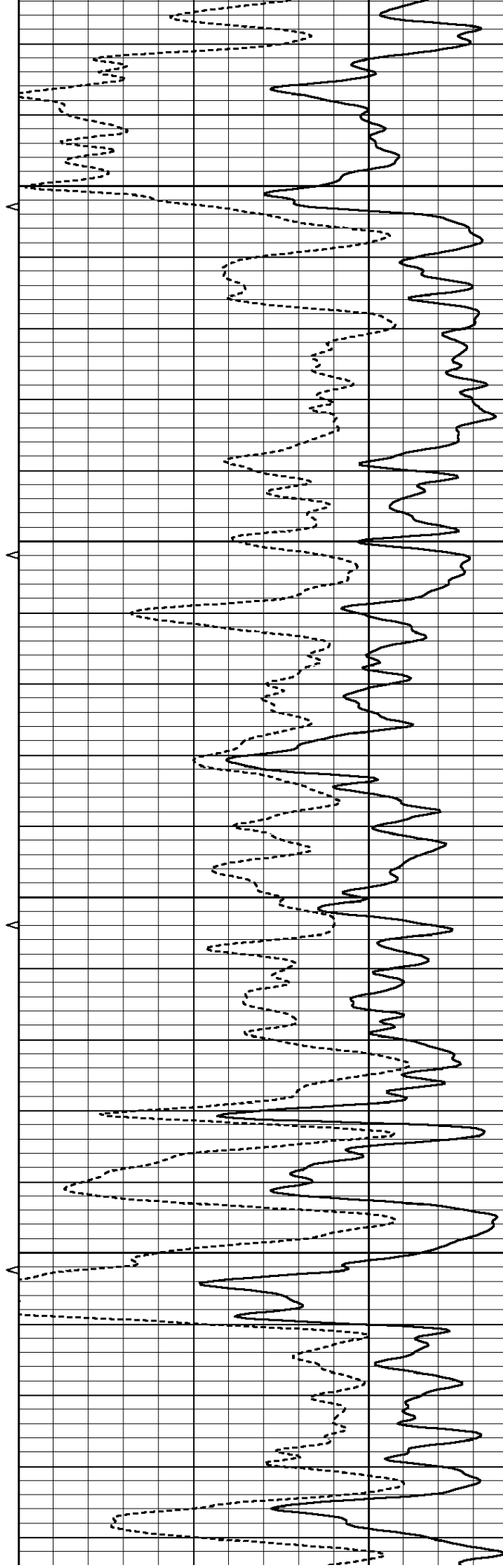


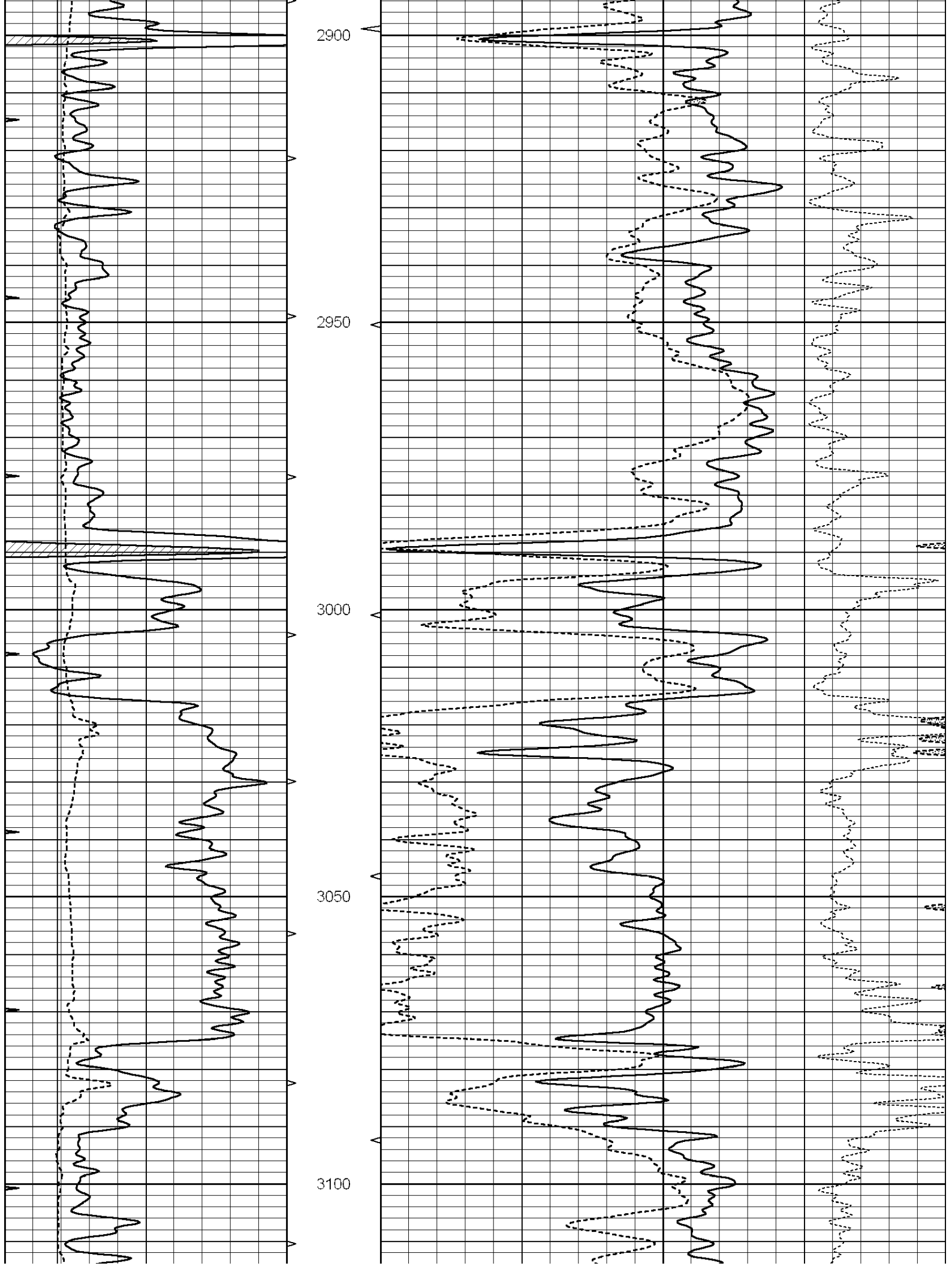
2700

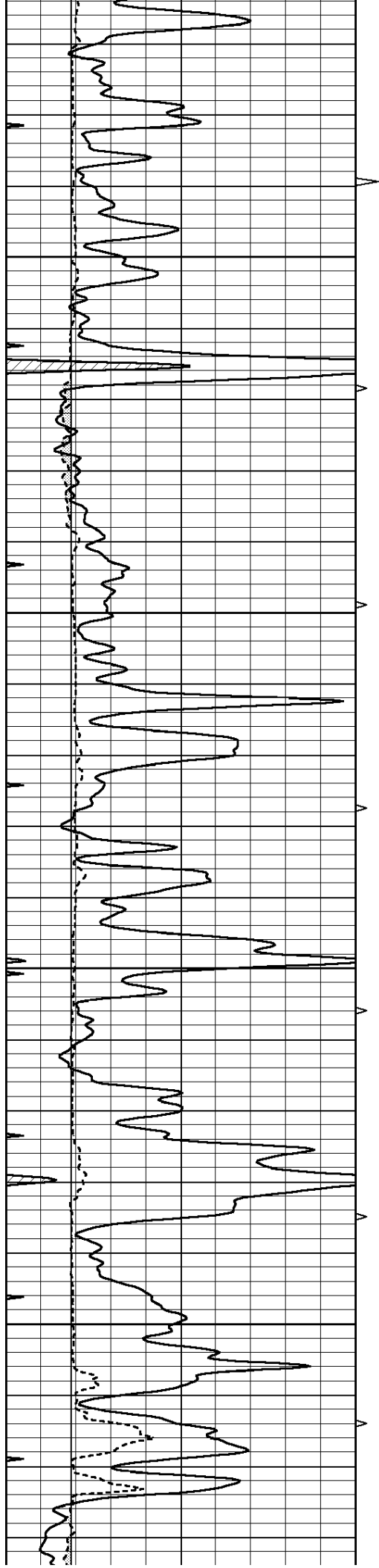
2750

2800

2850





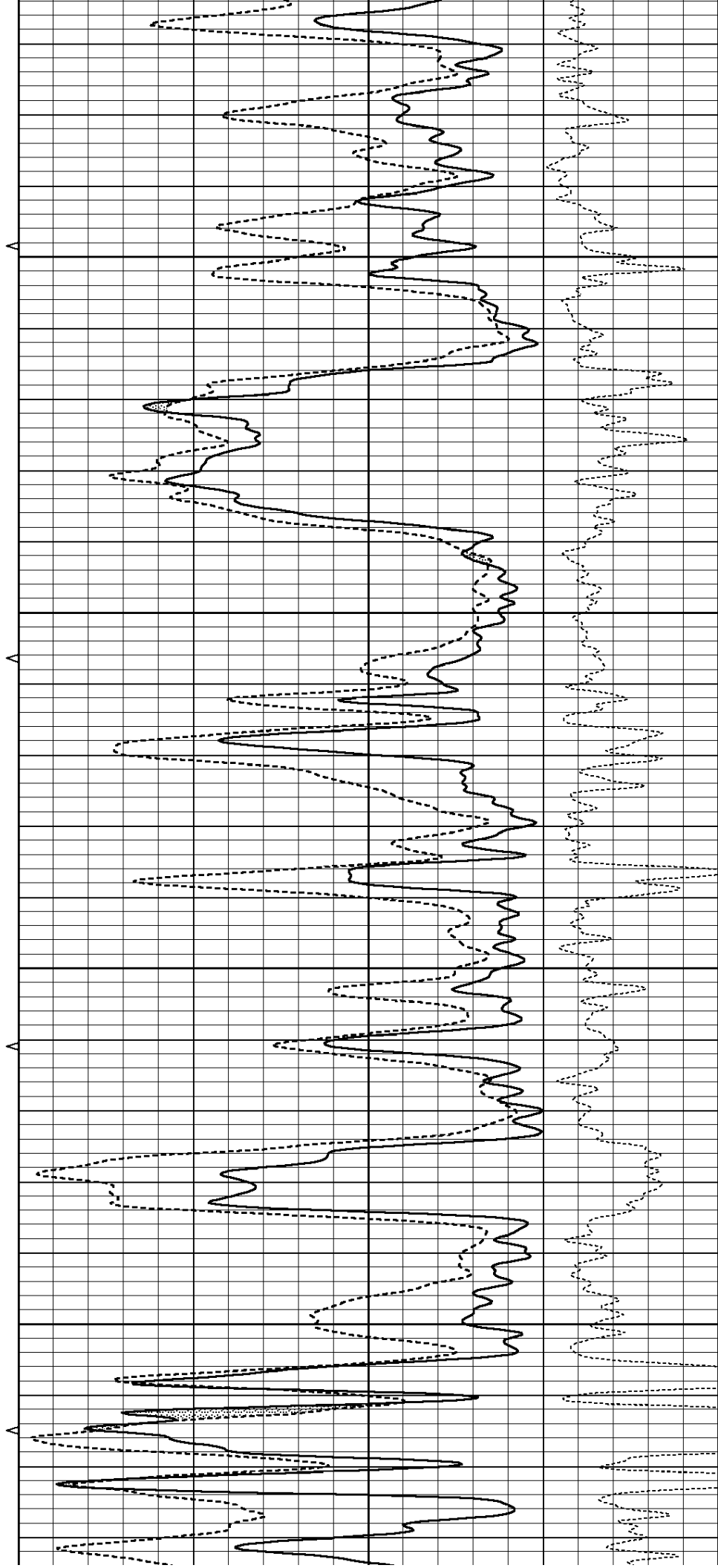


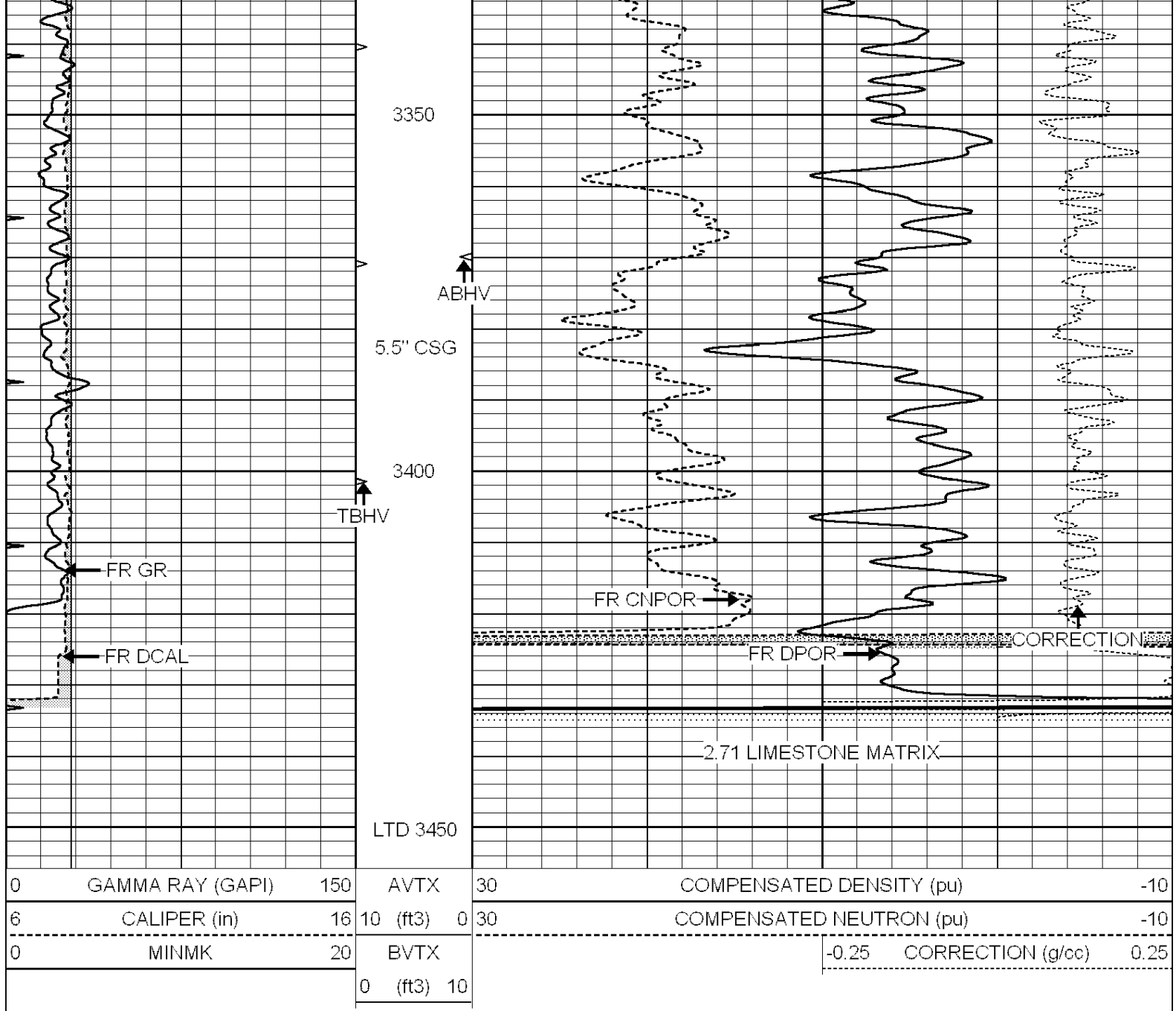
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3200

3250

3300

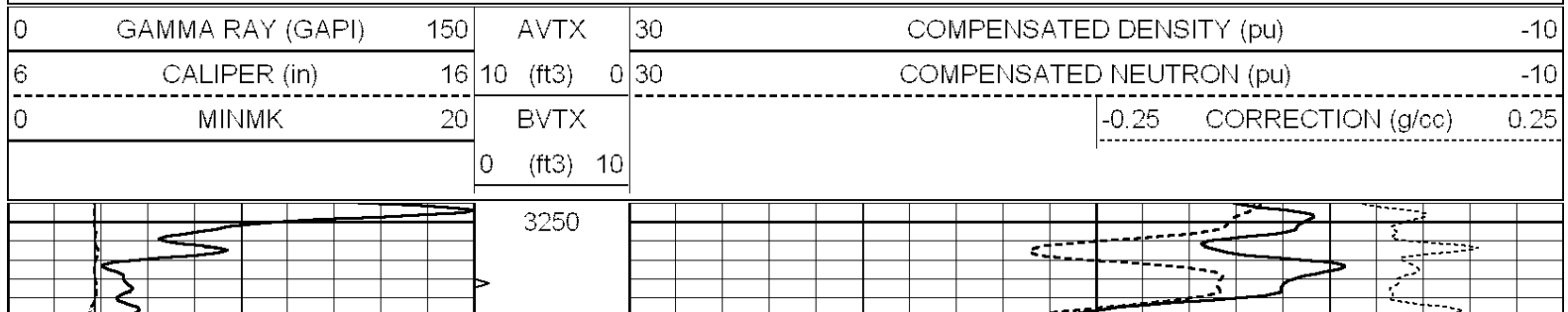


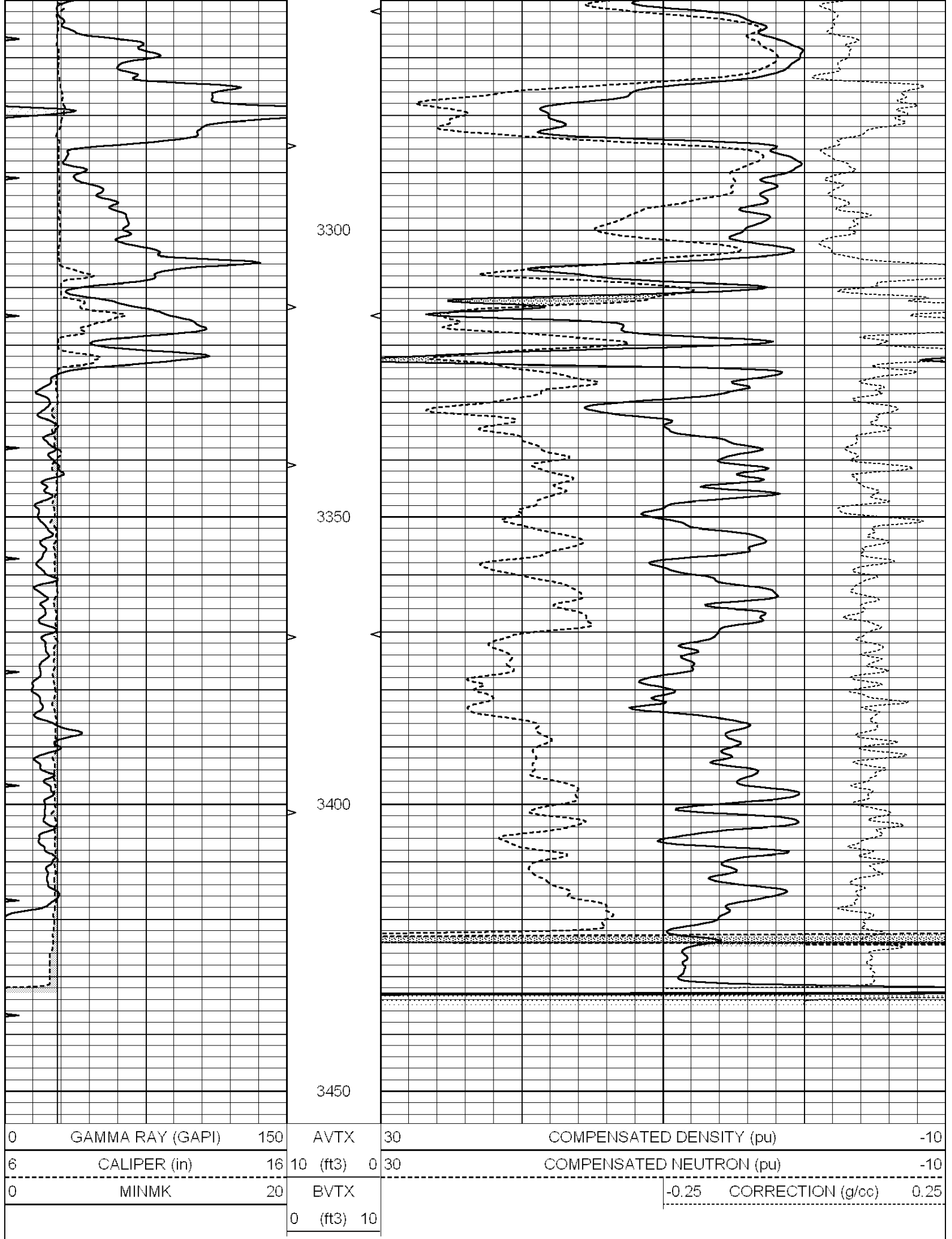


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REPEAT SECTION

Database File: 008099ddn.db
 Dataset Pathname: pass2.1.1
 Presentation Format: _den_neu
 Dataset Creation: Fri Dec 09 05:41:07 2011 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240







SUPERIOR

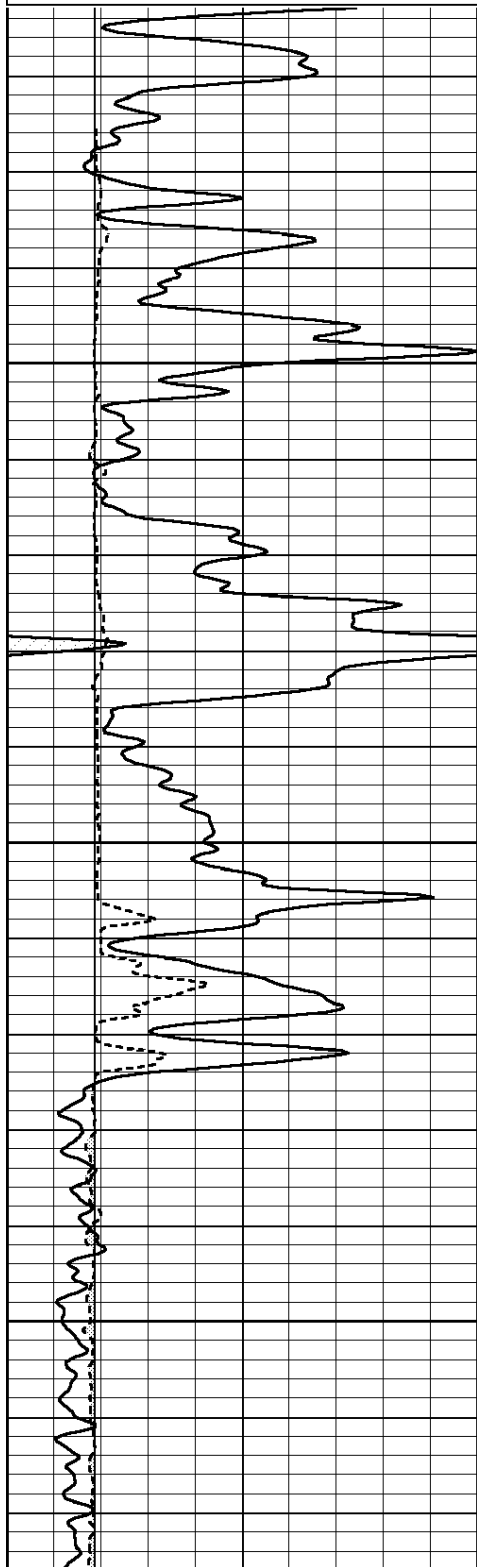
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2.81 DOLOMITE MATRIX

Database File: 008099ddn.db
Dataset Pathname: pass2.3
Presentation Format: _den_neu
Dataset Creation: Fri Dec 09 05:33:39 2011
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	CALIPER (in)	16

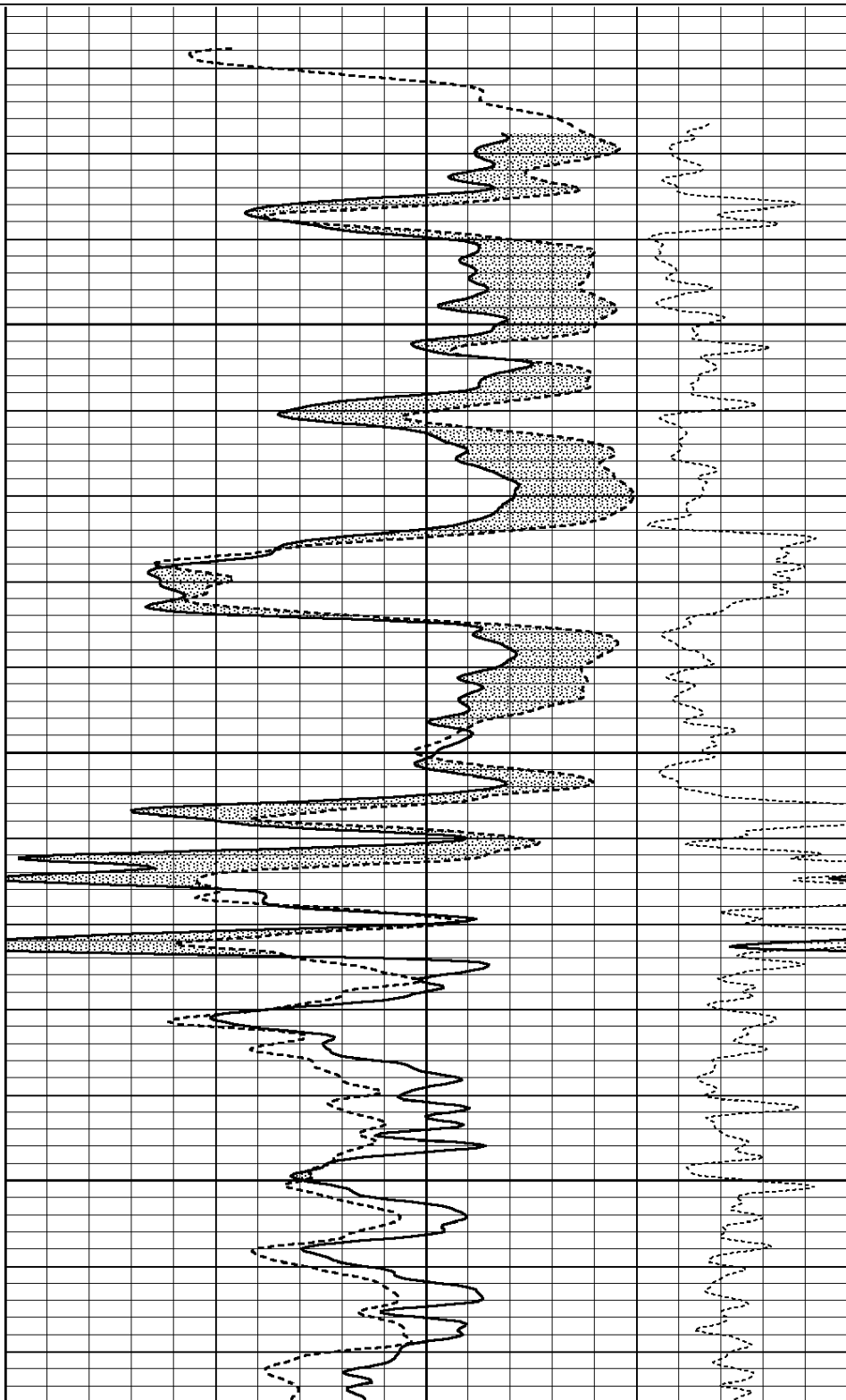
30	COMPENSATED DENSITY (pu)	-10
30	COMPENSATED NEUTRON (pu)	-10
-0.25	CORRECTION (g/cc)	0.25

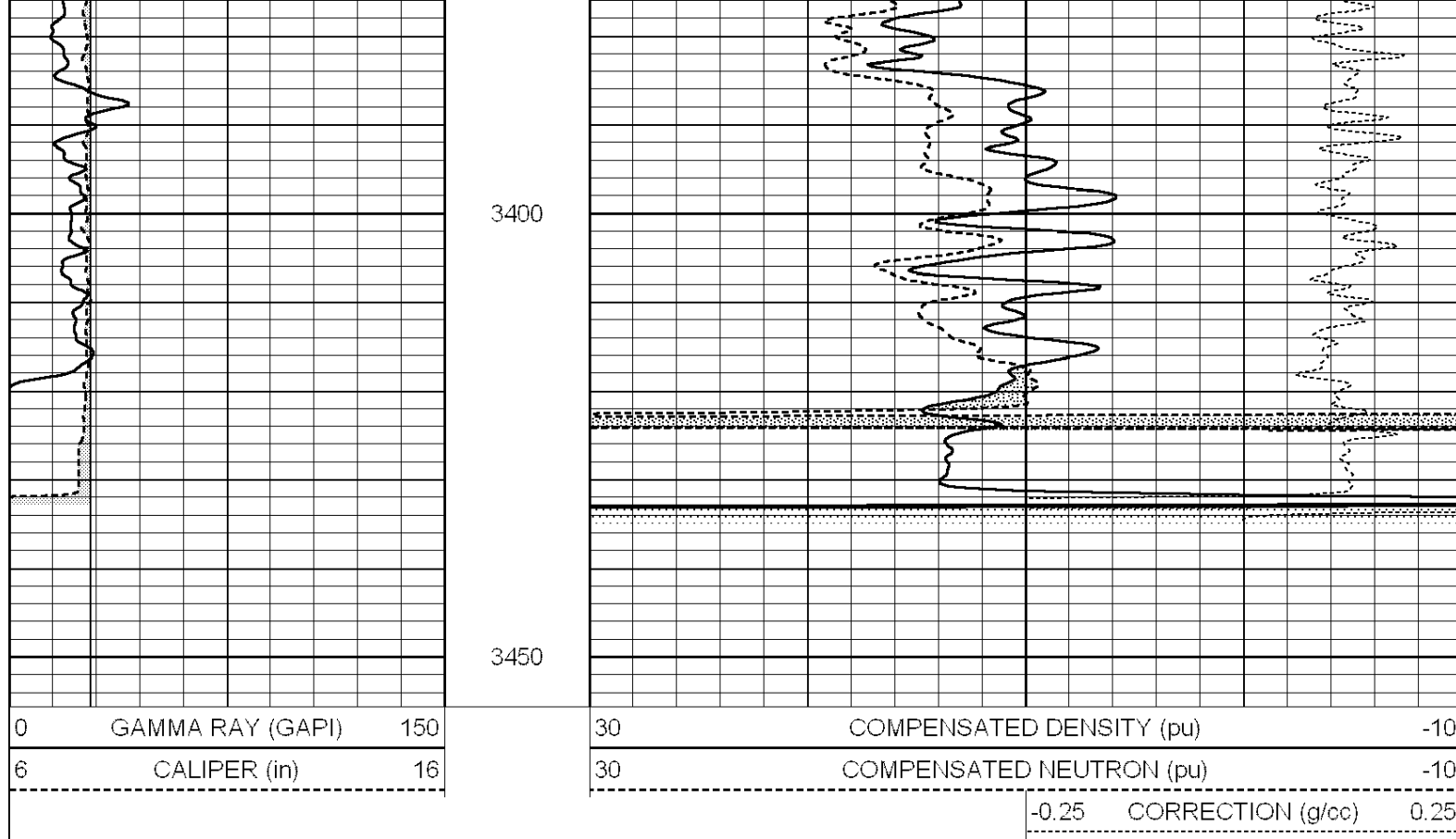


3250

3300

3350





Calibration Report

Database File: 008099ddn.db
 Dataset Pathname: pass3.1
 Dataset Creation: Fri Dec 09 06:04:38 2011 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Wed Jul 30 06:14:24 2008
Downhole Cal Performed:	Mon Jul 28 12:02:56 2008
After Survey Verification Performed:	Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	621.923	8.759
Medium	0.039	0.728	V	0.000	464.000	mmho/m	673.322	-26.058
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		

After Survey Verification

Readings				Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: GEAR4-GEARHART
 Source / Verifier: 143 / 143
 Master Calibration Performed: Sat Jul 16 17:35:04 2011

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1015.91	497.51	cps
Aluminum	2.580	g/cc	227.67	350.20	cps

Spine Angle = 76.79 Density/Spine Ratio = 0.566

	Size		Reading	
Small Ring	8.00	in	2.24	V
Large Ring	14.00	in	4.38	V

Compensated Neutron Calibration Report

Serial Number: 6I
 Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	1.00 cps	1.00 cps	1.0000
Long Space	1.00 cps	1.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: #8
 Tool Model: OPEN
 Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps