NABORS COMPLETION & PRODUCTION SERVICES CO.

COMPENSATED DENSITY/NEUTRON LOG

Company	KANTOR OIL CO., LLC
Well	BOTT K-2
Field	BURRTON
County	HARVEY
State	KANSAS

Company KANTOR OIL CO., LLC
Well BOTT K-2
Field BURRTON
County HARVEY State KANSAS
Location: API # : 15-079-20709-00-00
610' FSL & 2640' FEL
N2 - S2 - S2 - S2
SEC 7 TWP 23S RGE 3W
Permanent Datum GROUND LEVEL Elevation 1469
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING

Other Services: DIL

Elevation: K.B. 1477, D.F. 1475, G.L. 1469

Date	11/19/14		
Run Number	ONE		
Depth Driller	3901		
Depth Logger	3894		
Bottom Logged Interval	3870		
Top Log Interval	2300		
Casing Driller	13 3/8" @ 308'		
Casing Logger	304'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1,500 PPM	
Density / Viscosity	9.1/42		
pH / Fluid Loss	11.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.50 @ 62F		
Rmf @ Meas. Temp	1.13 @ 62F		
Rmc @ Meas. Temp	1.80 @ 62F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.81 @ 115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	115F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	TERRY MCLEOD		

<<< Fold Here >>>

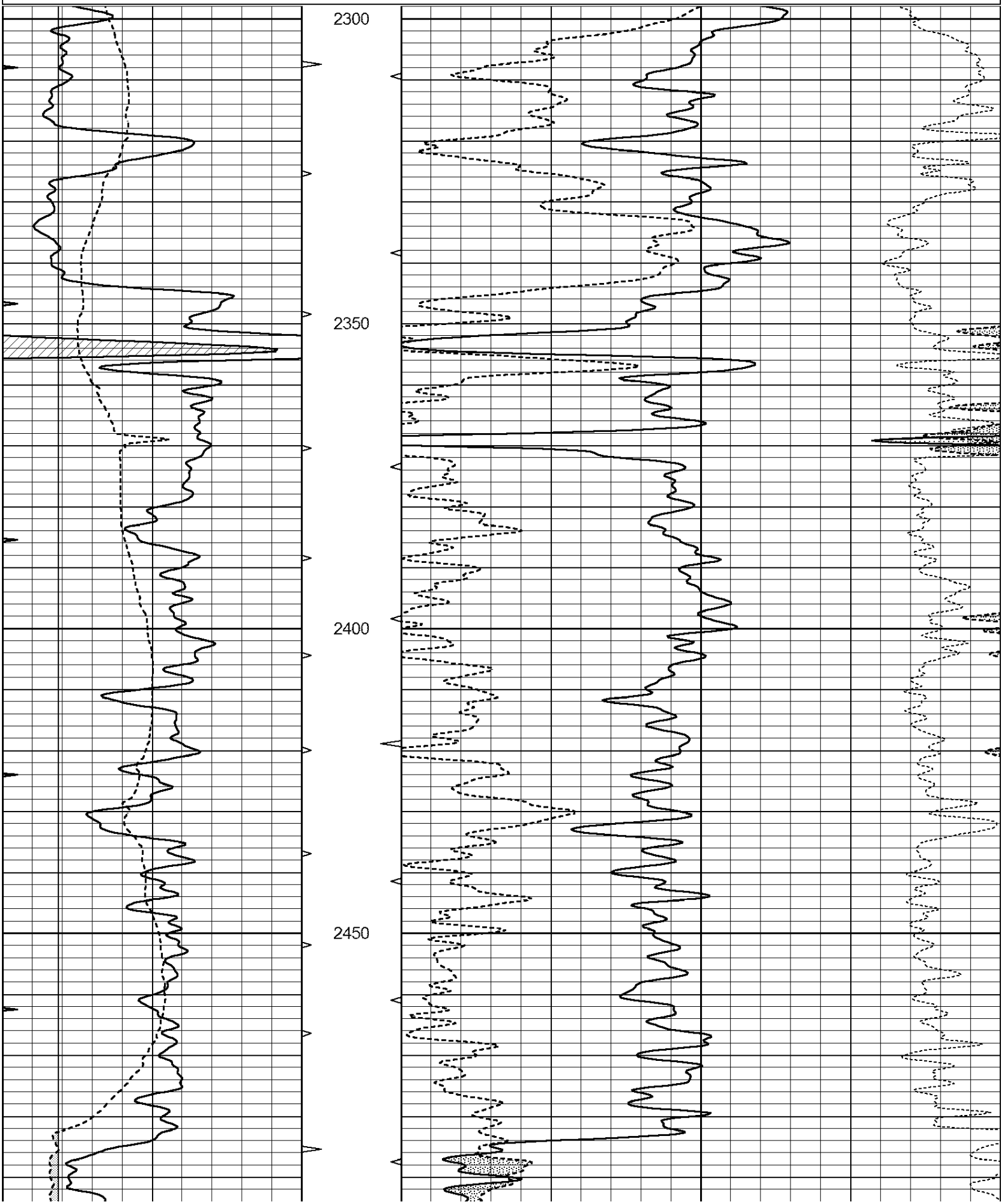
Comments

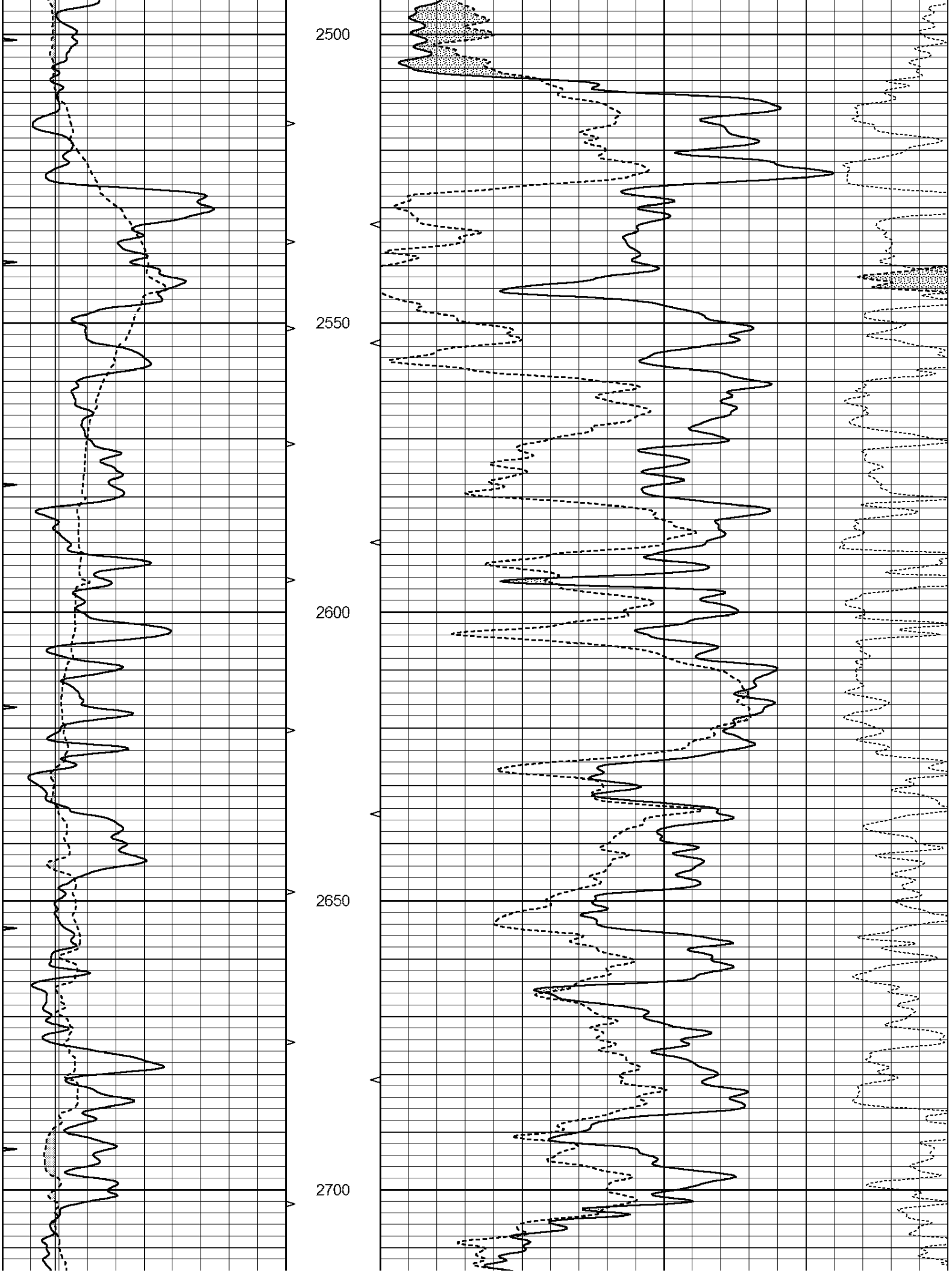
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
BURRTON, KS. - NORTH 2 MILES TO NW 12TH ST. WEST 1 1/4 MILE - NORTH INTO

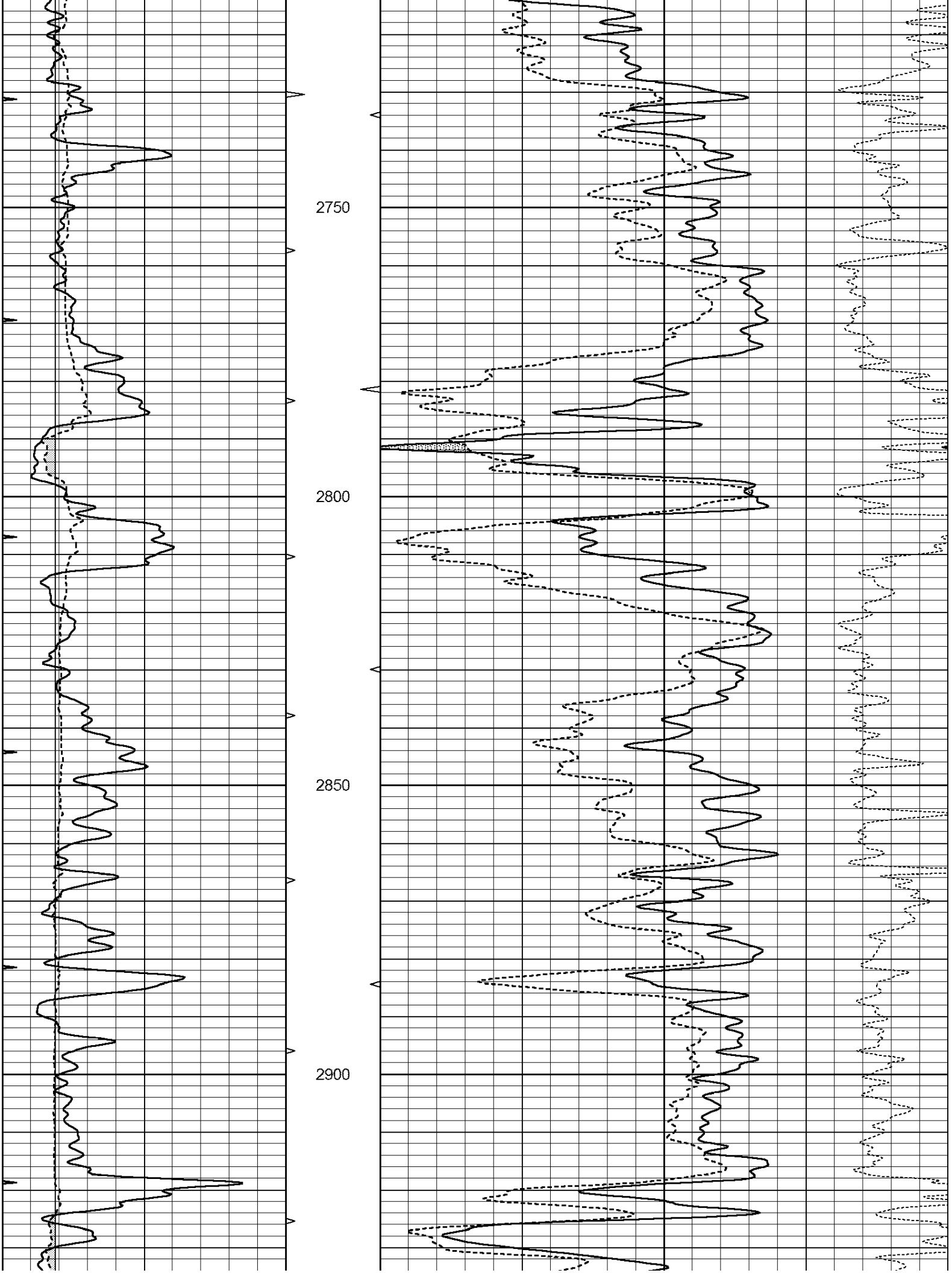
Database File:	26407ddn.db
Dataset Pathname:	pass3.1
Presentation Format:	den_neu
Dataset Creation:	Wed Nov 19 09:29:45 2014 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:240

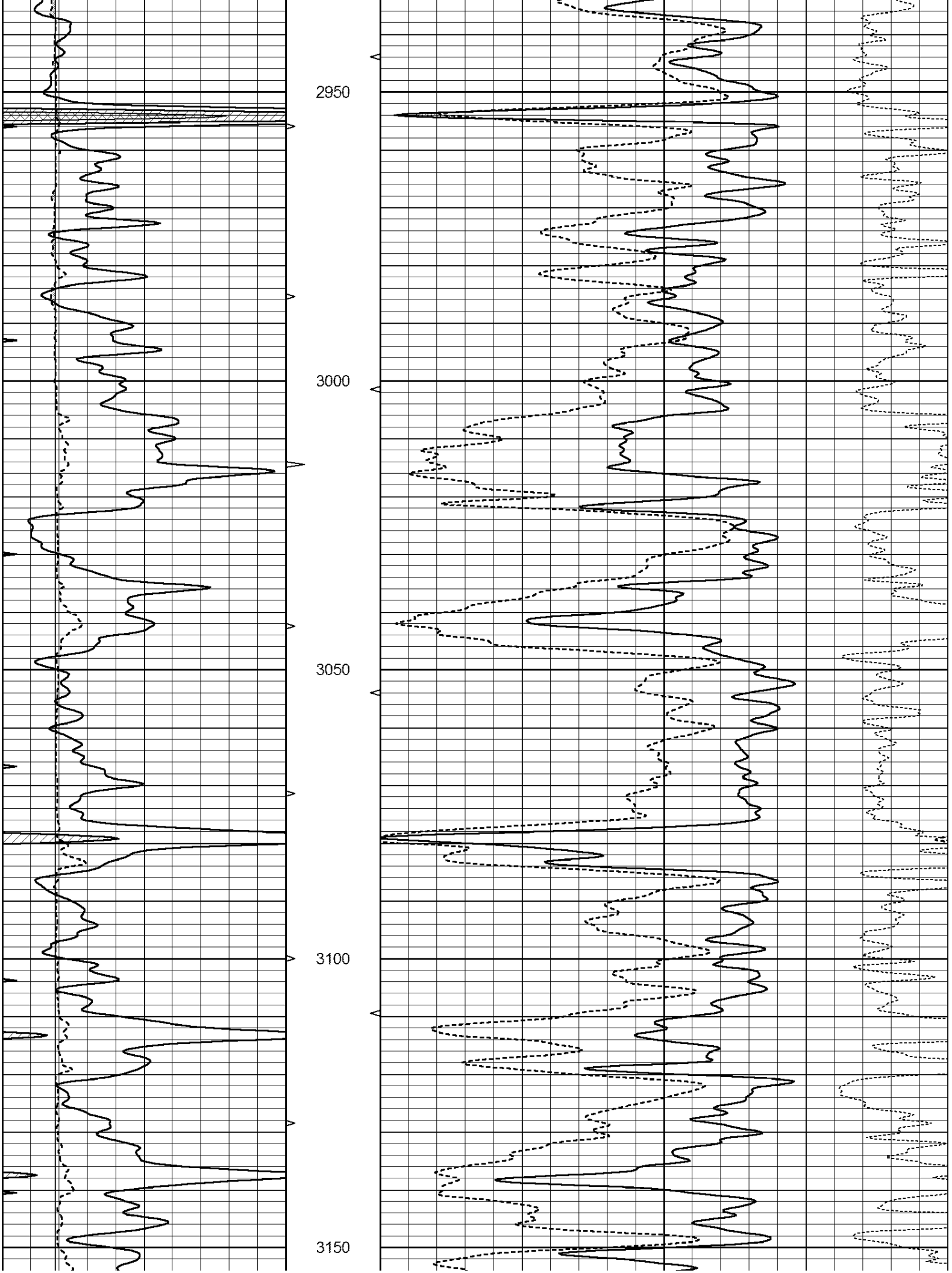
Charted by: Depth in Feet scaled 1:240

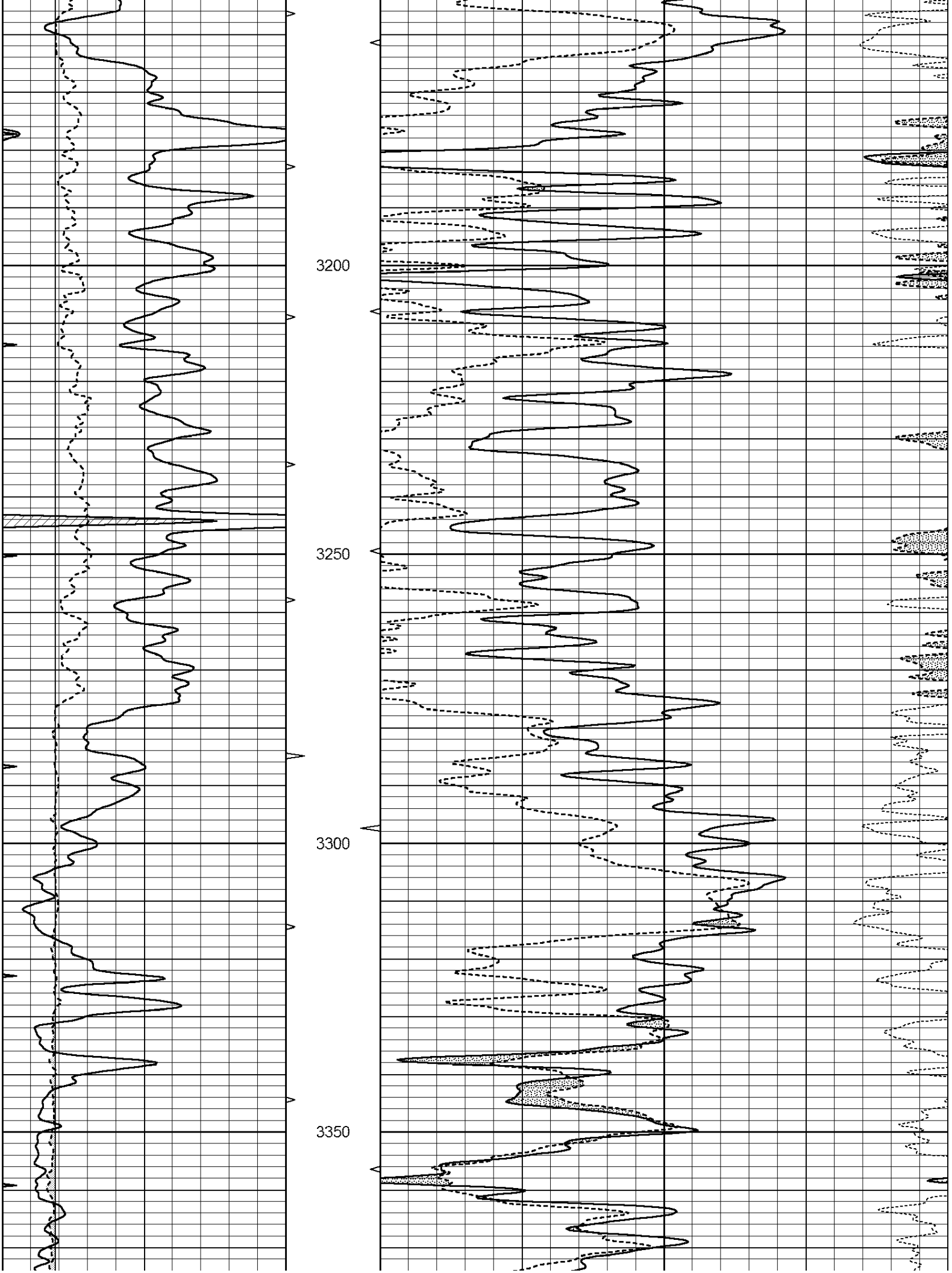
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu) -10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu) -10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10		

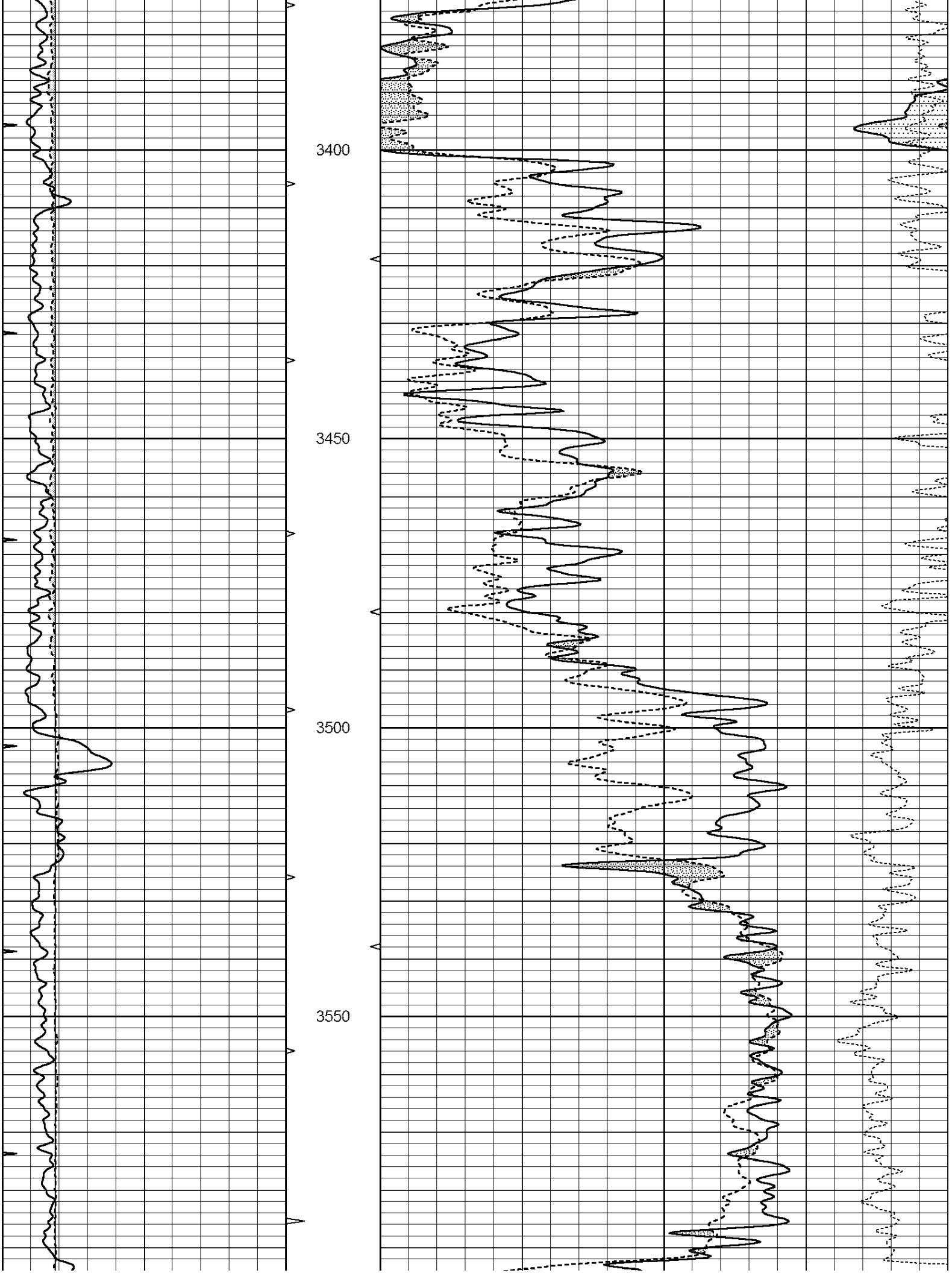


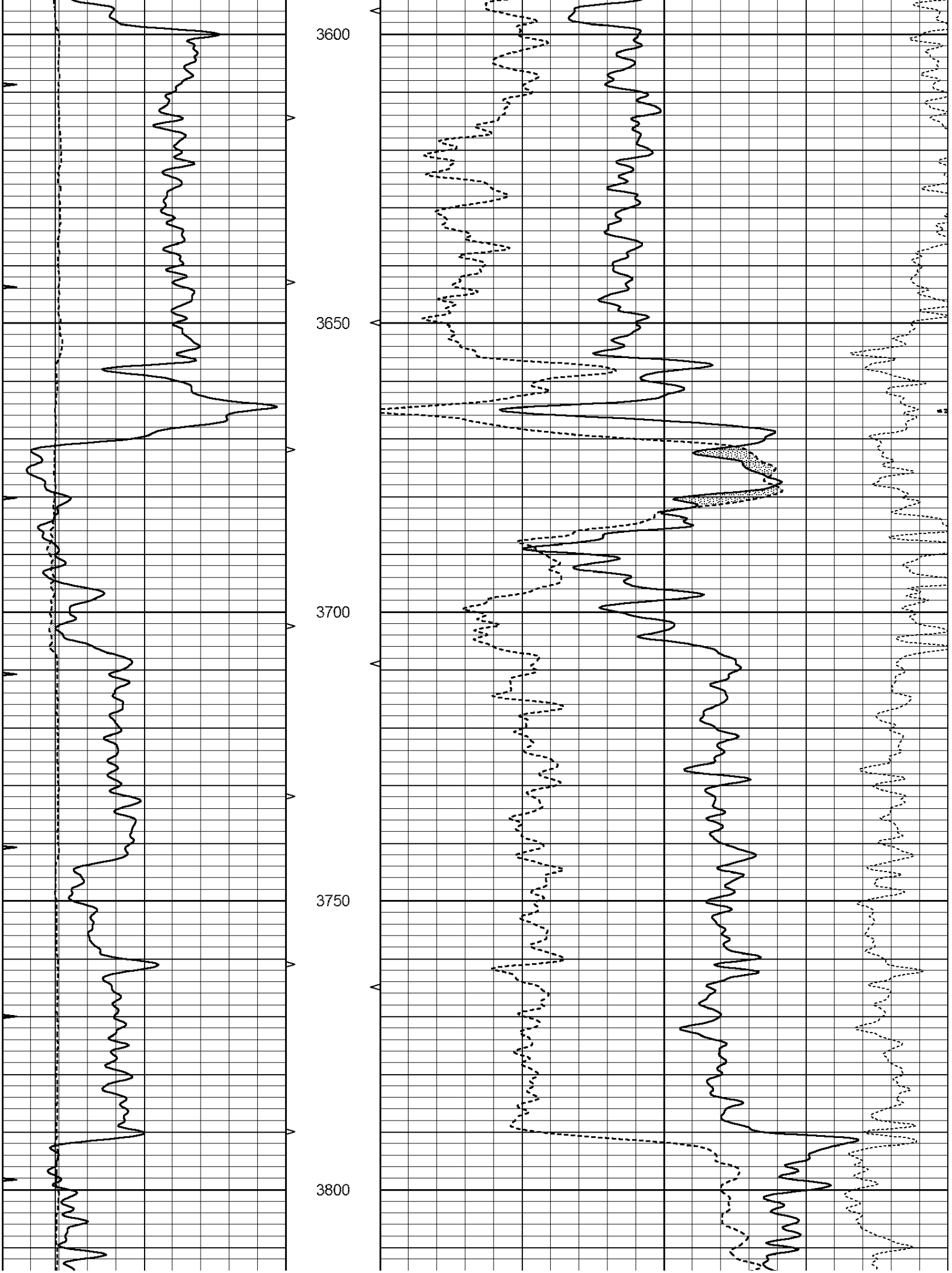

2500
2550
2600
2650
2700

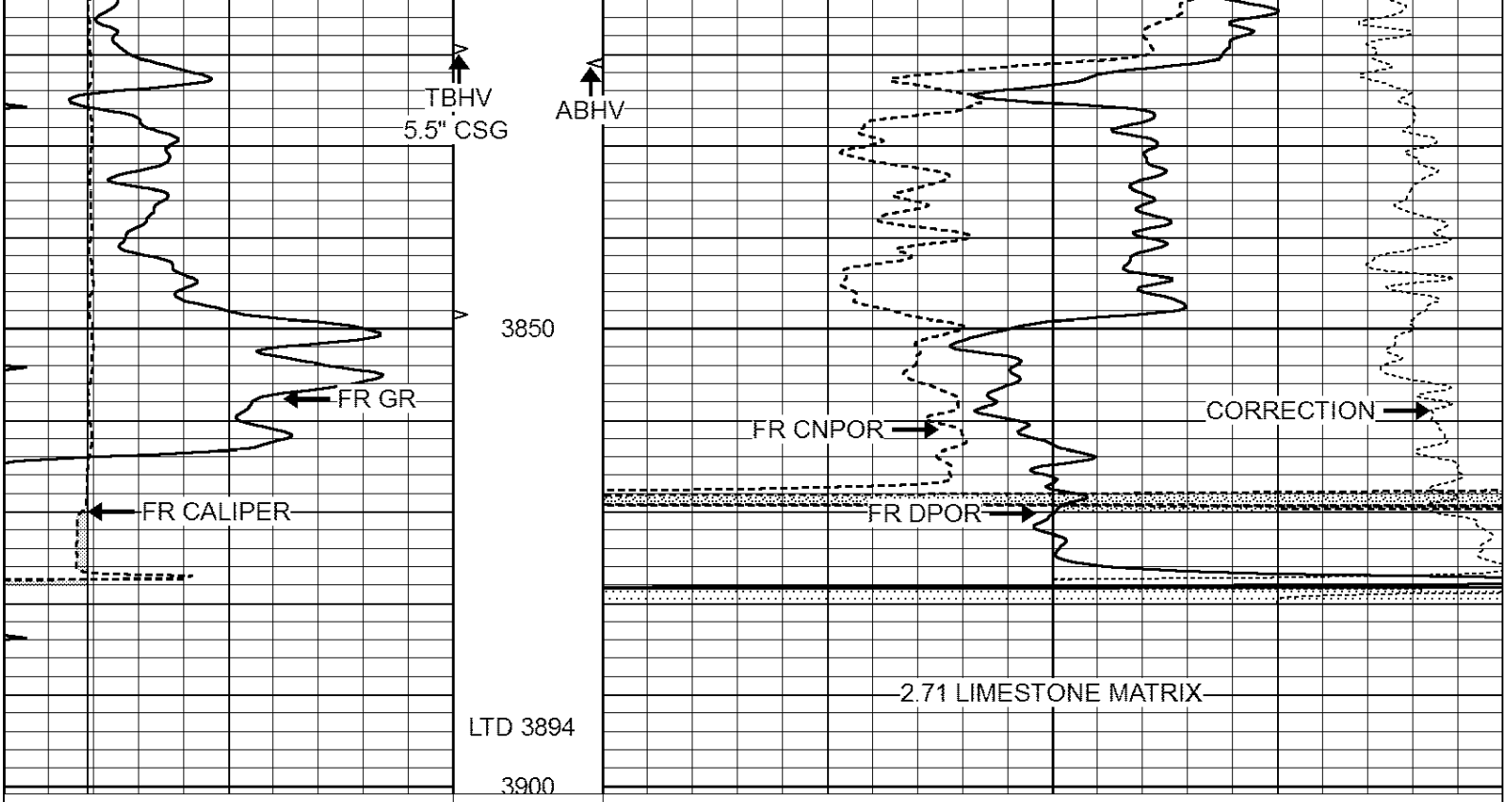

2750
2800
2850
2900


2950
3000
3050
3100
3150


3200
3250
3300
3350


3400
3450
3500
3550


3600
3650
3700
3750
3800



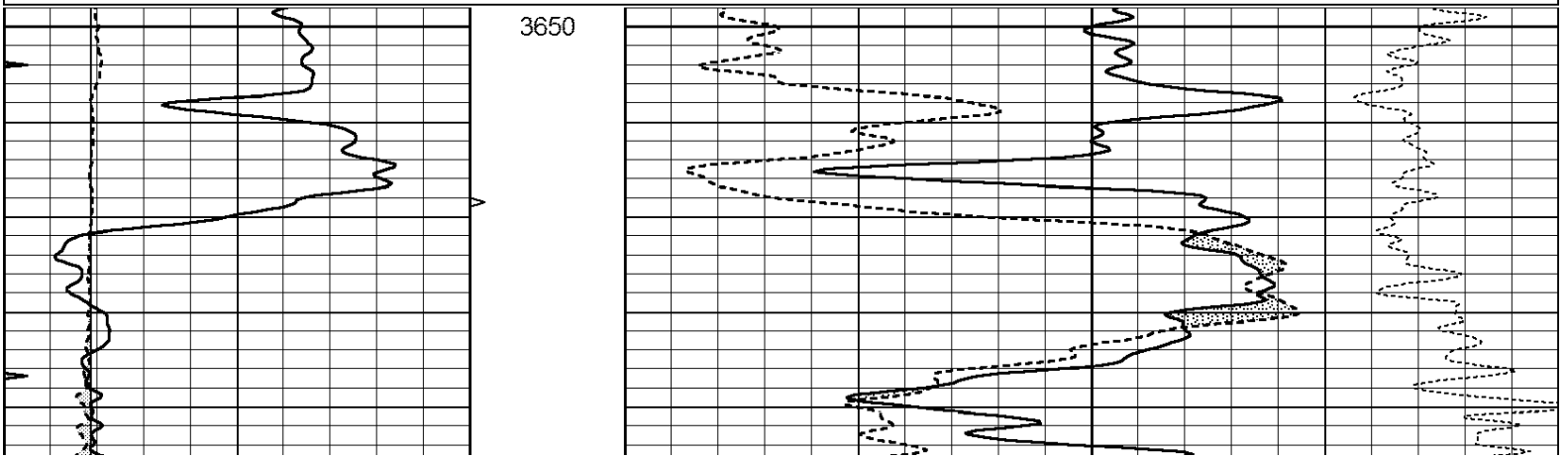
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)		-10
0	MINMK	20	TBHV			-0.25 CORRECTION (g/cc)	0.25
			0 (ft3) 10				

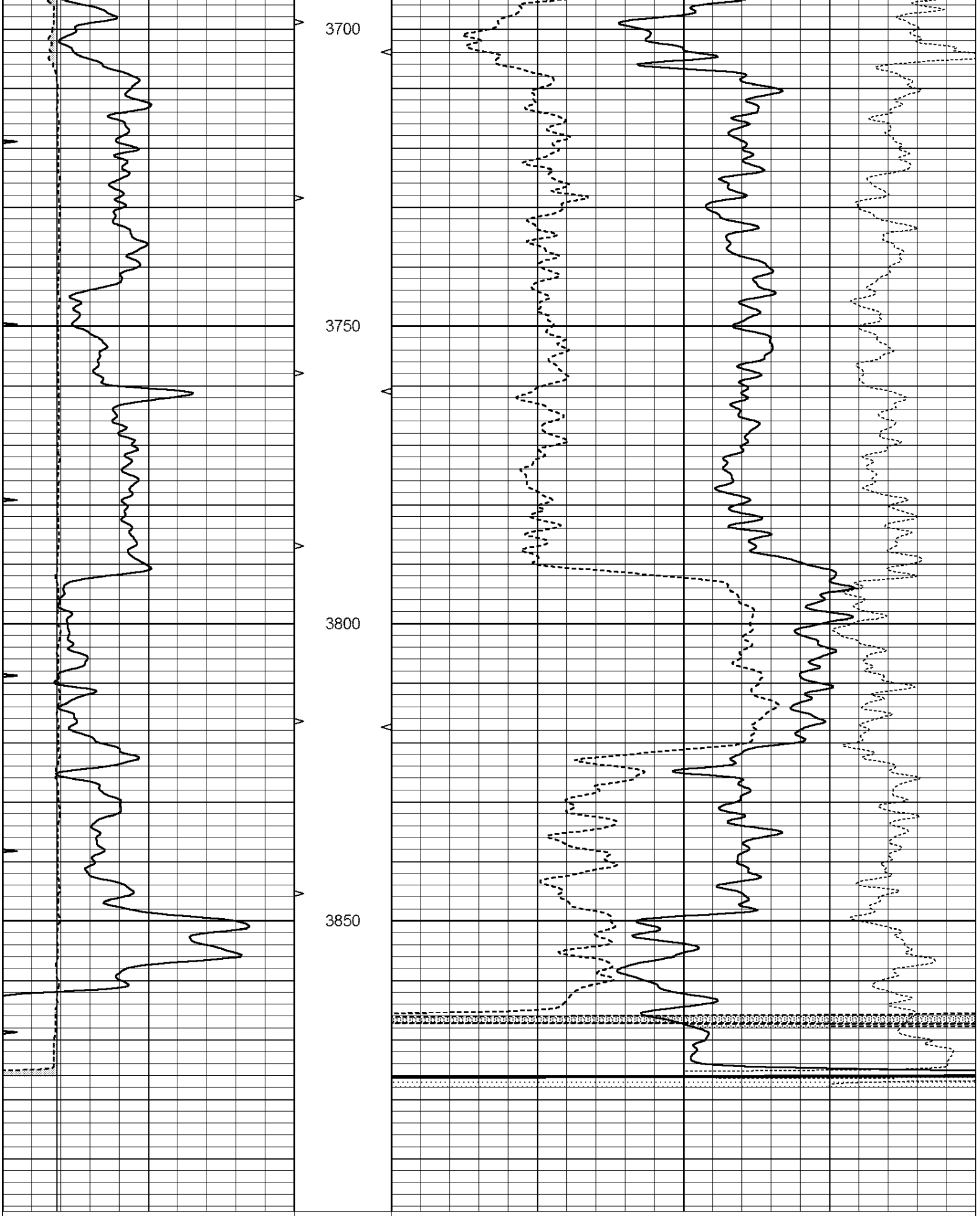
NABORS
COMPLETION & PRODUCTION SERVICES CO.

REPEAT SECTION

Database File: 26407ddn.db
Dataset Pathname: pass2.3
Presentation Format: den_neu
Dataset Creation: Wed Nov 19 08:44:54 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

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




3700
3750
3800
3850
0 GAMMA RAY (GAPI) 150
6 CALIPER (in) 16
0 MINMK 20
ABHV
10 (ft3) 0
TBHV
30 COMPENSATED DENSITY (pu) -10
30 COMPENSATED NEUTRON (pu) -10
-0.25 CORRECTION (g/cc) 0.25

0	(ft3)	10

Calibration Report

Database File: 26407ddn.db
Dataset Pathname: pass3.1
Dataset Creation: Wed Nov 19 09:29:45 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
Surface Cal Performed: Sun Aug 17 08:09:53 2014
Downhole Cal Performed: Mon Jul 28 11:08:27 2008
After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	-2.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-16.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	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: Wed Sep 18 03:03:09 2013
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1075.98	532.39	cps
Aluminum	2.560	g/cc	286.51	422.88	cps

Spine Angle = 80.13

Density/Spine Ratio = 0.633

Size	Reading

Small Ring	8.00	in	3.21	V
Large Ring	14.00	in	5.46	V

Before Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

After Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

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

PRE-SURVEY VERIFICATION

	Detector	Readings		Measured		Target	
1)	Short Space		cps				
	Long Space		cps		pu		pu
2)	Short Space		cps				
	Long Space		cps		pu		
3)	Short Space		cps				
	Long Space		cps		pu		

POST-SURVEY VERIFICATION

	Detector	Readings		Measured		Target	
1)	Short Space		cps				
	Long Space		cps		pu		pu
2)	Short Space		cps				
	Long Space		cps		pu		pu
3)	Short Space		cps				
	Long Space		cps		pu		pu

Gamma Ray Calibration Report

Serial Number:	GR6	
Tool Model:	OPEN	
Performed:	Sun Aug 17 15:23:09 2014	
Calibrator Value:	150.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	276.0	cps
Sensitivity:	0.7000	GAPI/cps