SUPERIOR
Hays, Kansas

RADIATION GUARD LOG

Company COBALT ENERGY, LLC.
Well HAAG TRUST "A" #1-24
Field
County LANE State KANSAS

Location: API # : 15-101-22321

1980' FSL & 335' FEL

SEC 24 TWP 19S RGE 28W

Other Services

Elevation
K.B. 2752
D.F.
G.L. 2741

Permanent Datum GROUND LEVEL Elevation 2741
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING

Company COBALT ENERGY, LLC.
Well HAAG TRUST "A" #1-24
Field
County LANE
State KANSAS

Date	11-22-11		
Run Number	ONE		
Depth Driller	4680		
Depth Logger	4678		
Bottom Logged Interval	4676		
Top Log Interval	00		
Casing Driller	212		
Casing Logger	214		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.55 / 54		
pH / Fluid Loss	9.5 / 7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.00 @ 90F		
Rmf @ Meas. Temp	0.75 @ 90F		
Rmc @ Meas. Temp	1.20 @ 90F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.740 @ 121F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	6:20 P.M.		
Maximum Recorded Temperature	121F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	ROBERT HENDRIX		

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Comments

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: DIGHTON, 6E TO QUANTUM RD., 6S, W INTO.
COMMENT: CUSTOMER ELECTED TO NOT RUN A REPEAT SECTION DUE TO HOLE CONDITIONS.

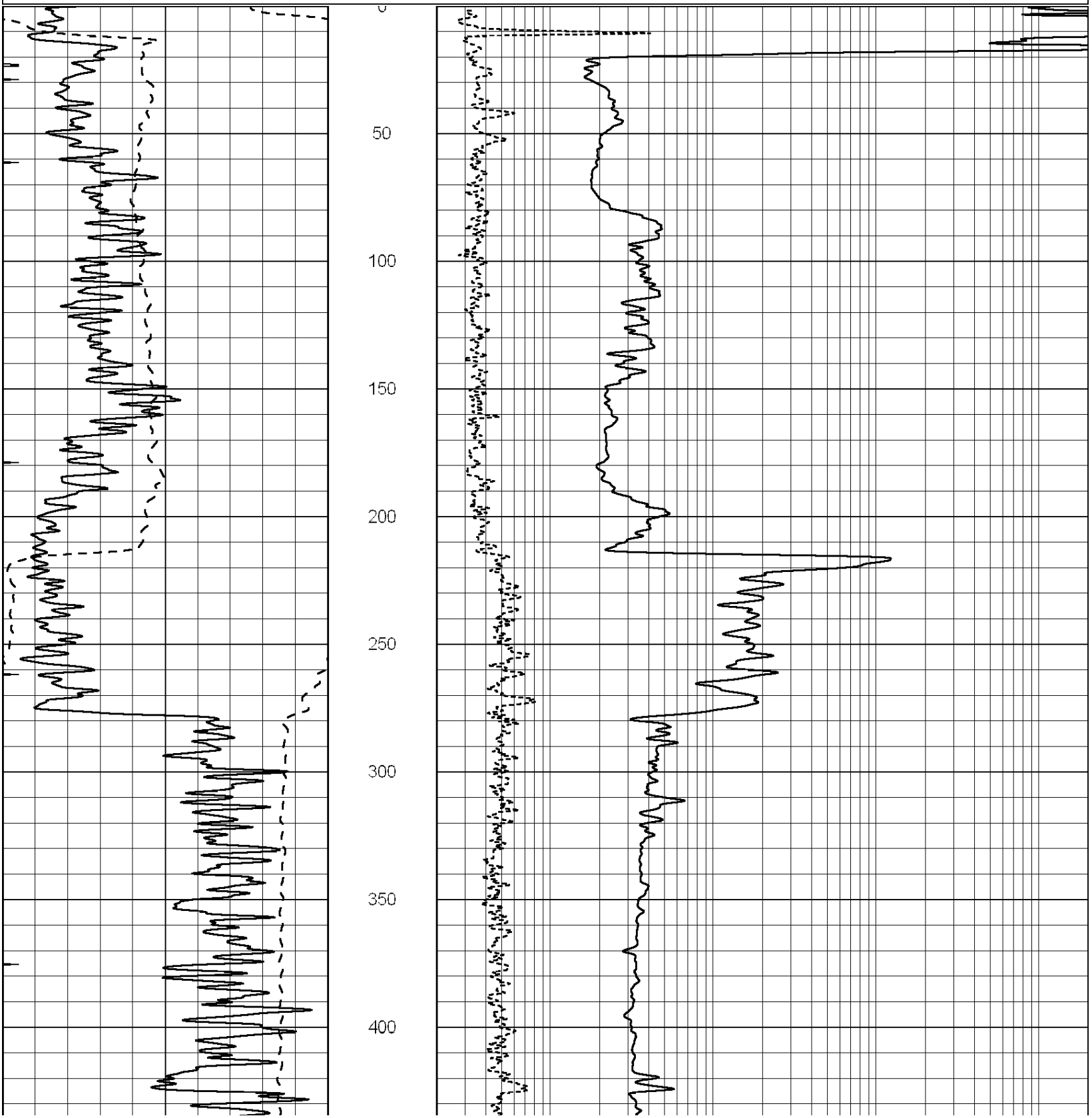
MAIN SECTION

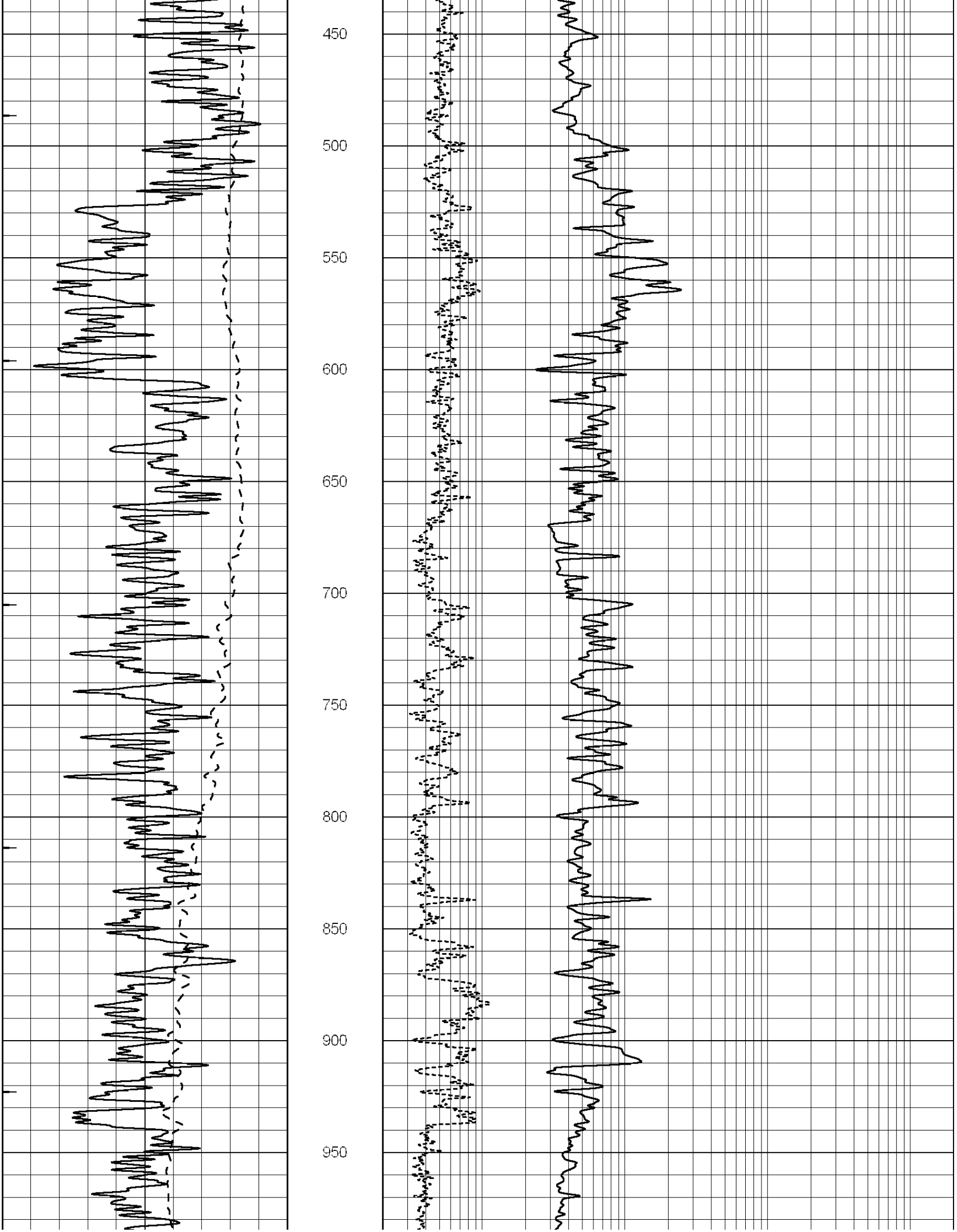
SUPERIOR
Hays,

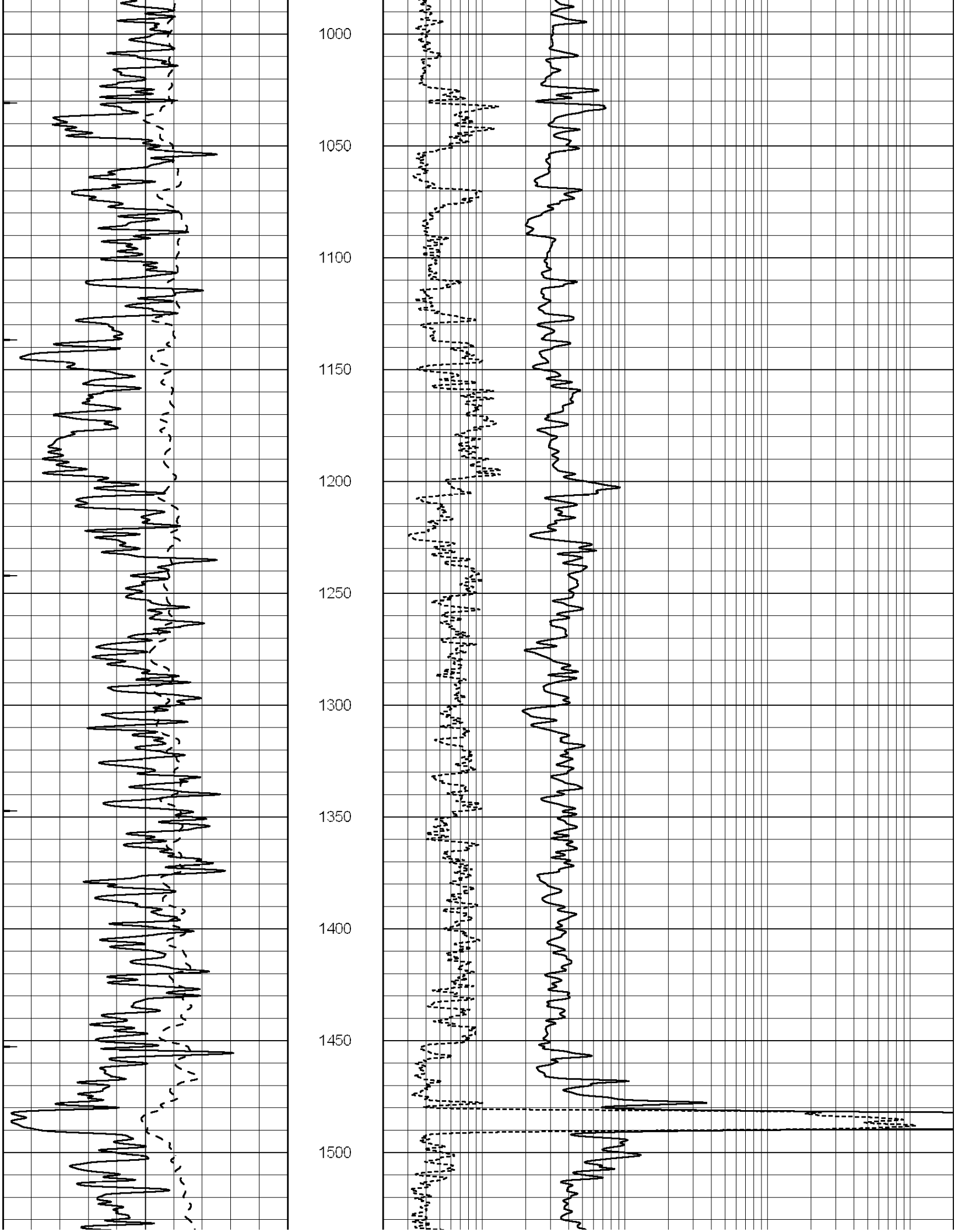
Kansas

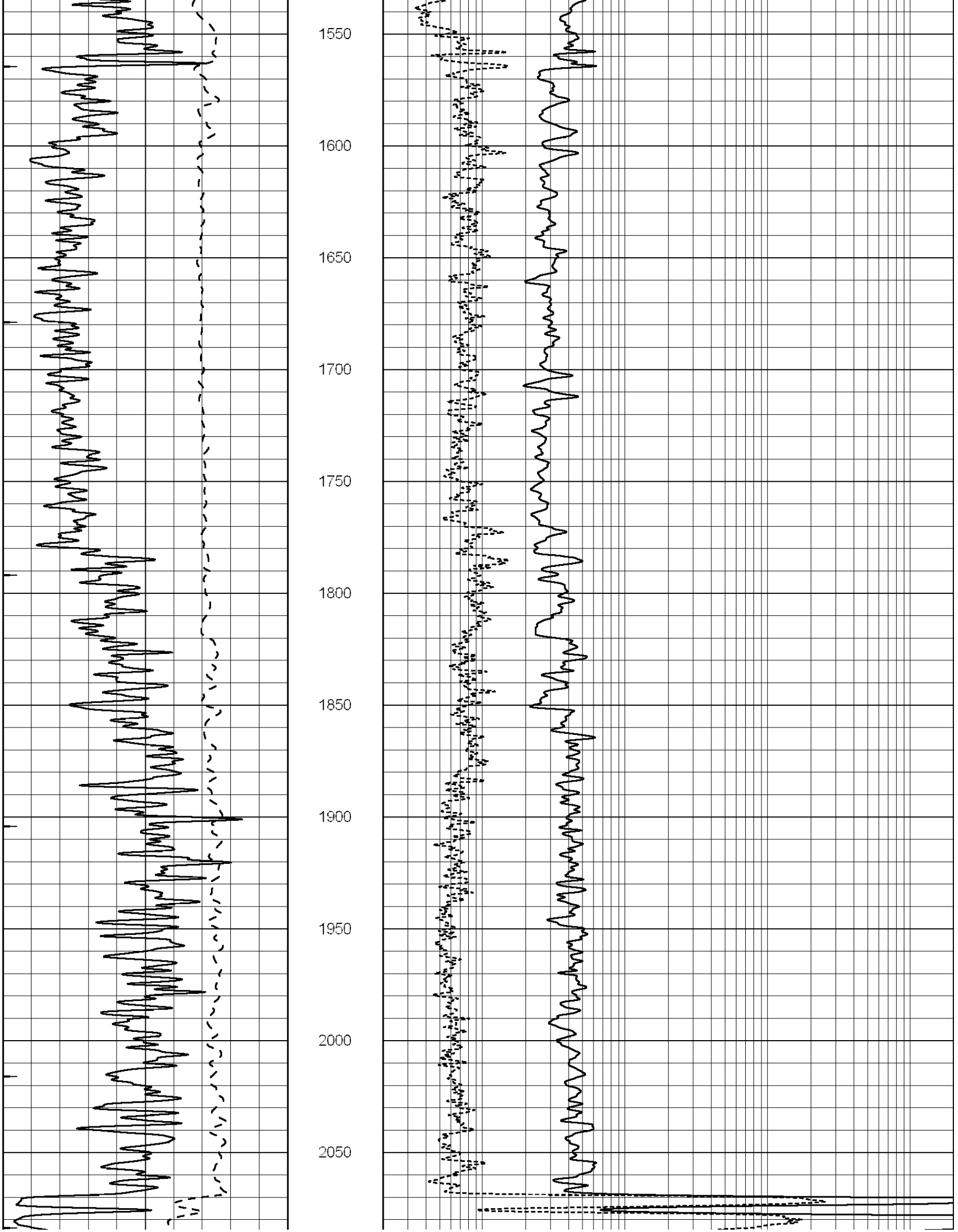
Database File:	008016rag.db
Dataset Pathname:	pass3.1
Presentation Format:	rag2
Dataset Creation:	Tue Nov 22 19:33:16 2011 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:600

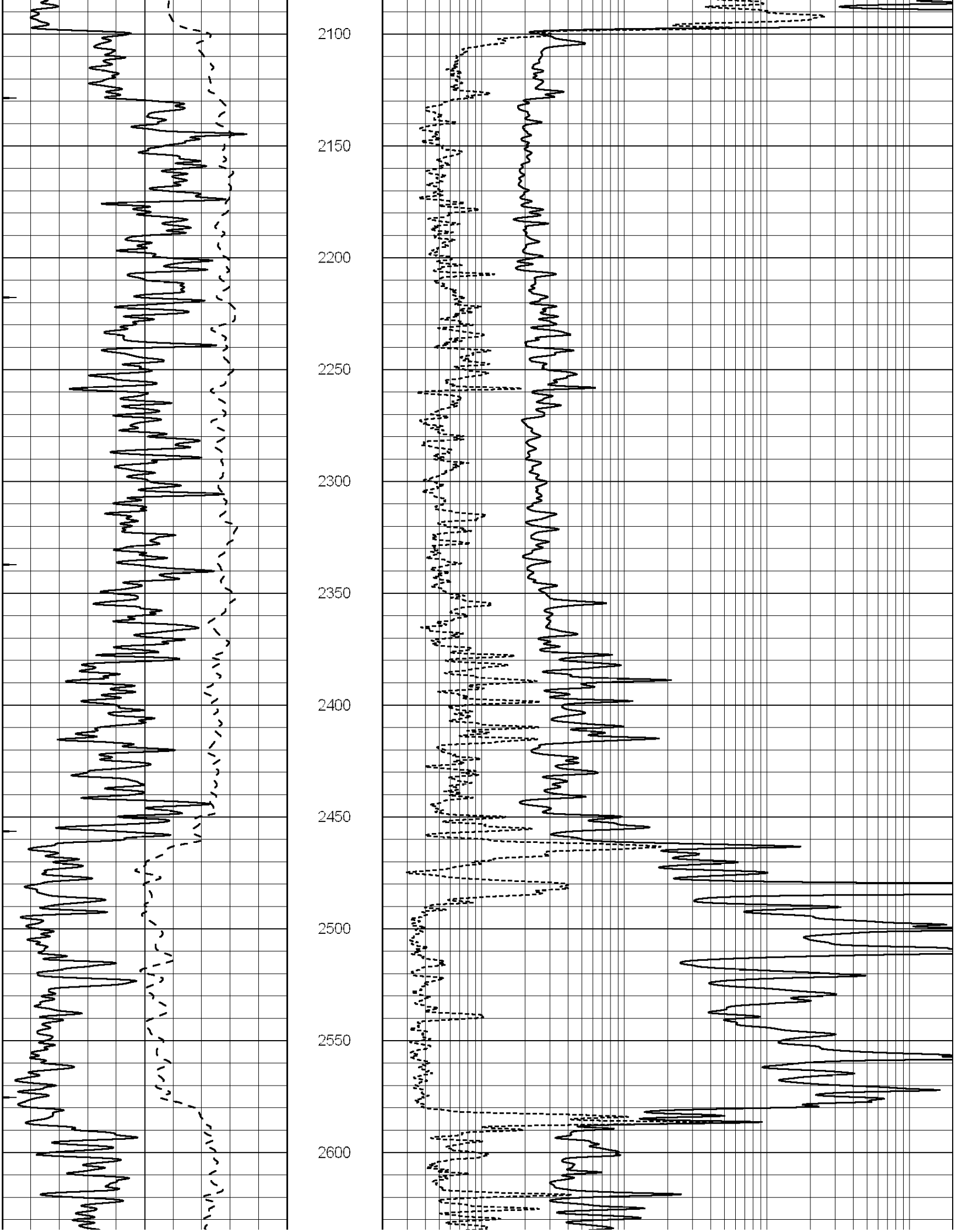
0	GAMMA RAY (GAPI) 150	ABHV (ft3)	0.2	GUARD (Ohm-m) 2000
-100	SP (mV) 100		0	NEUTRON (NAPI) 1000
		TBHV (ft3)		

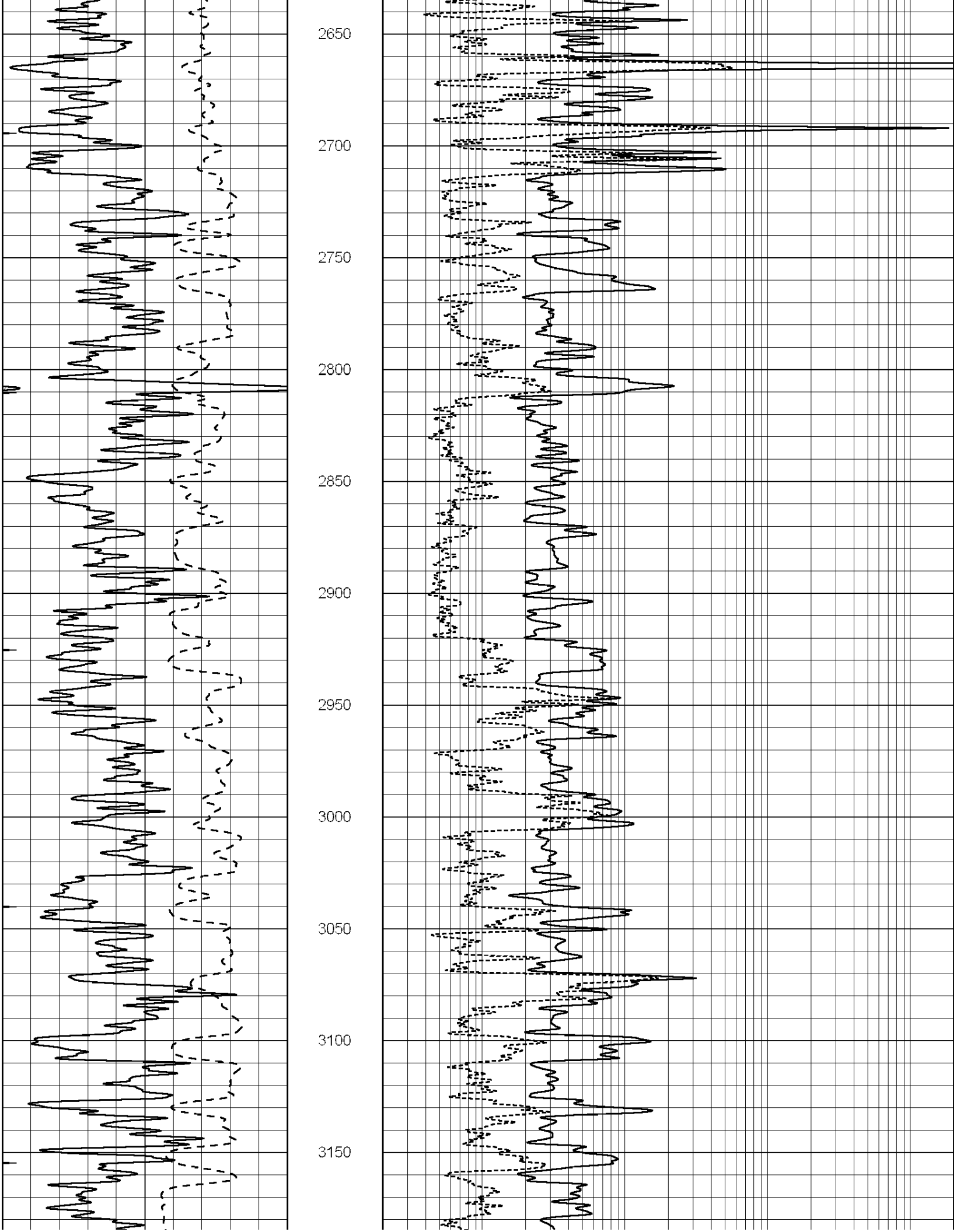


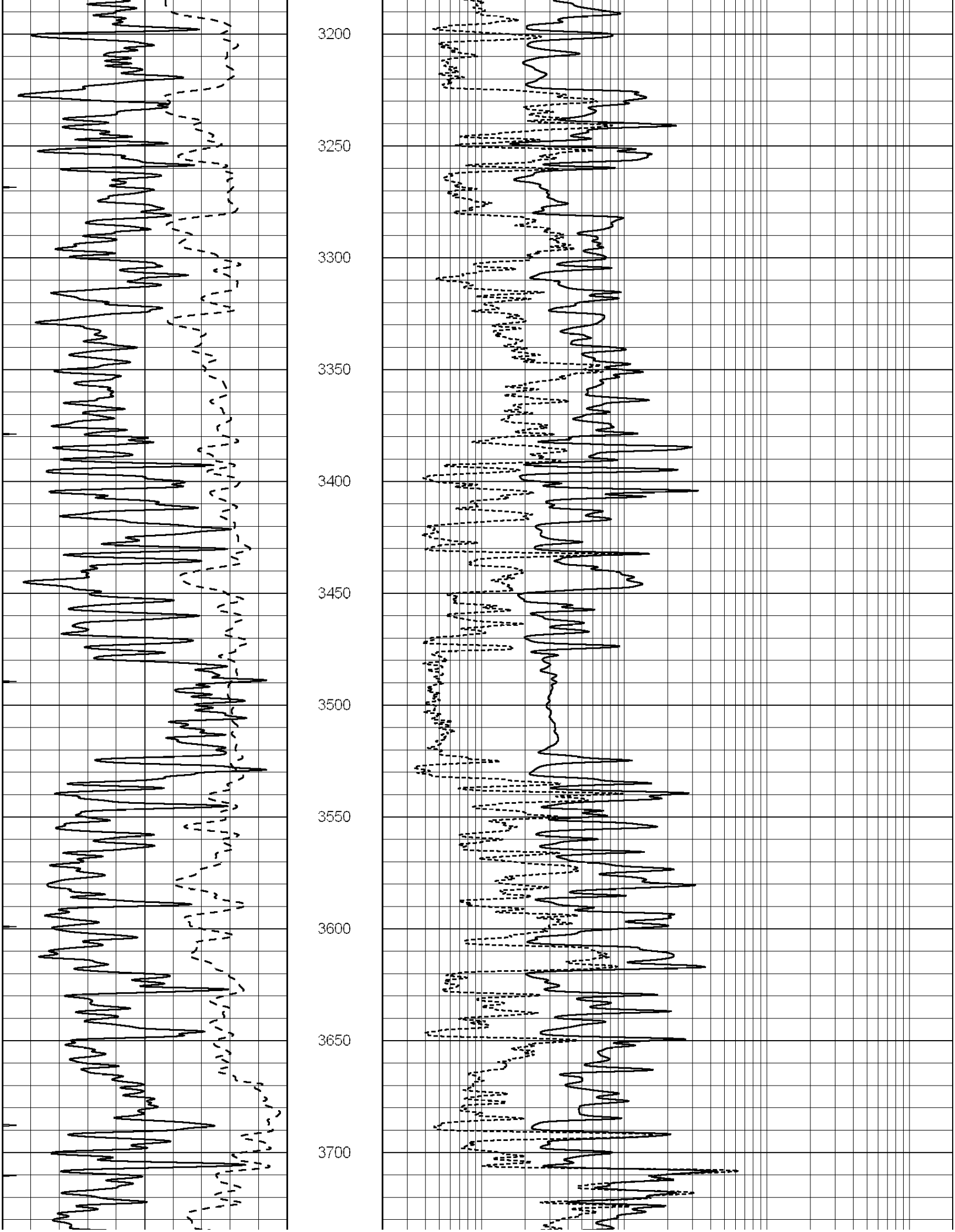

450
500
550
600
650
700
750
800
850
900
950

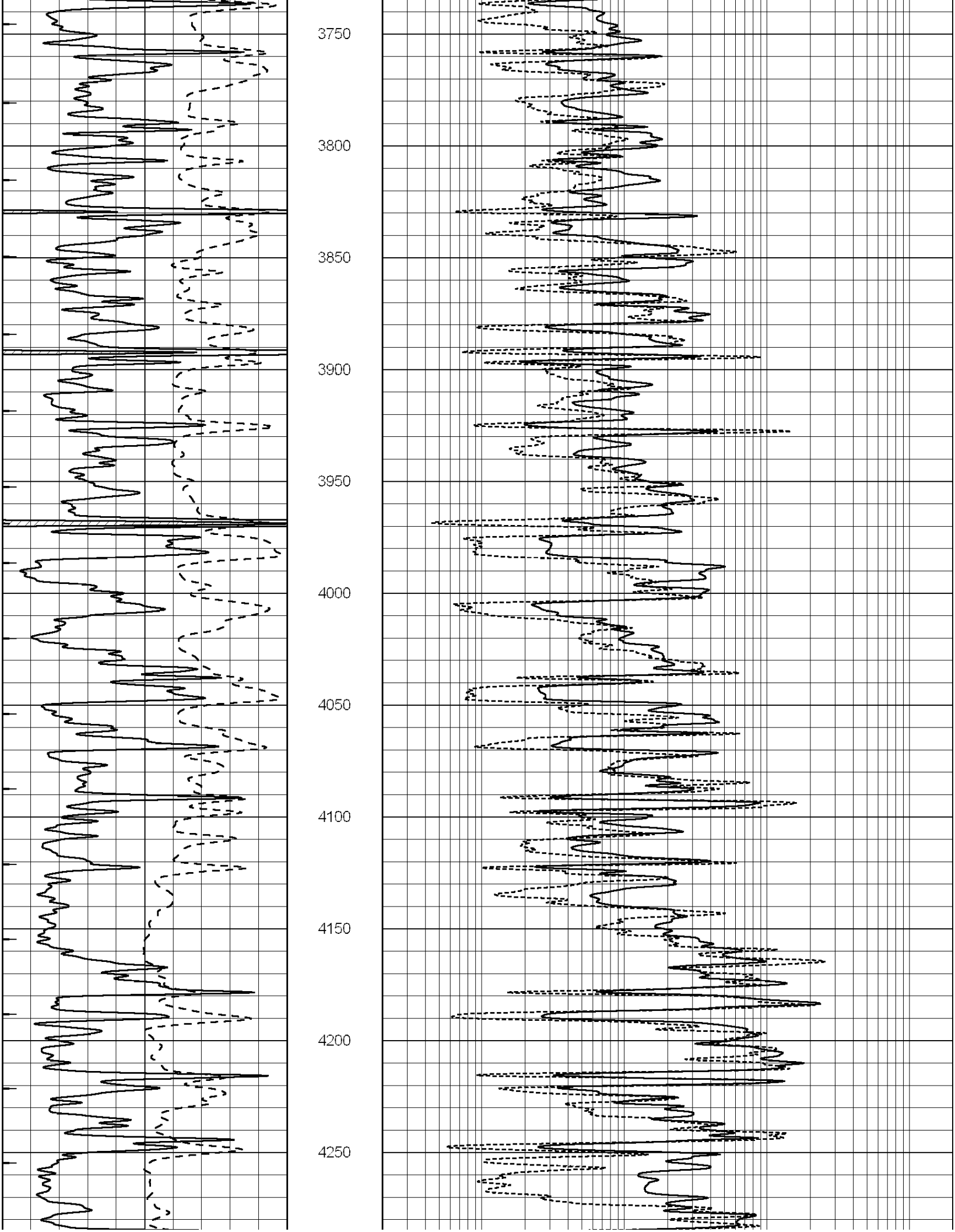

1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500

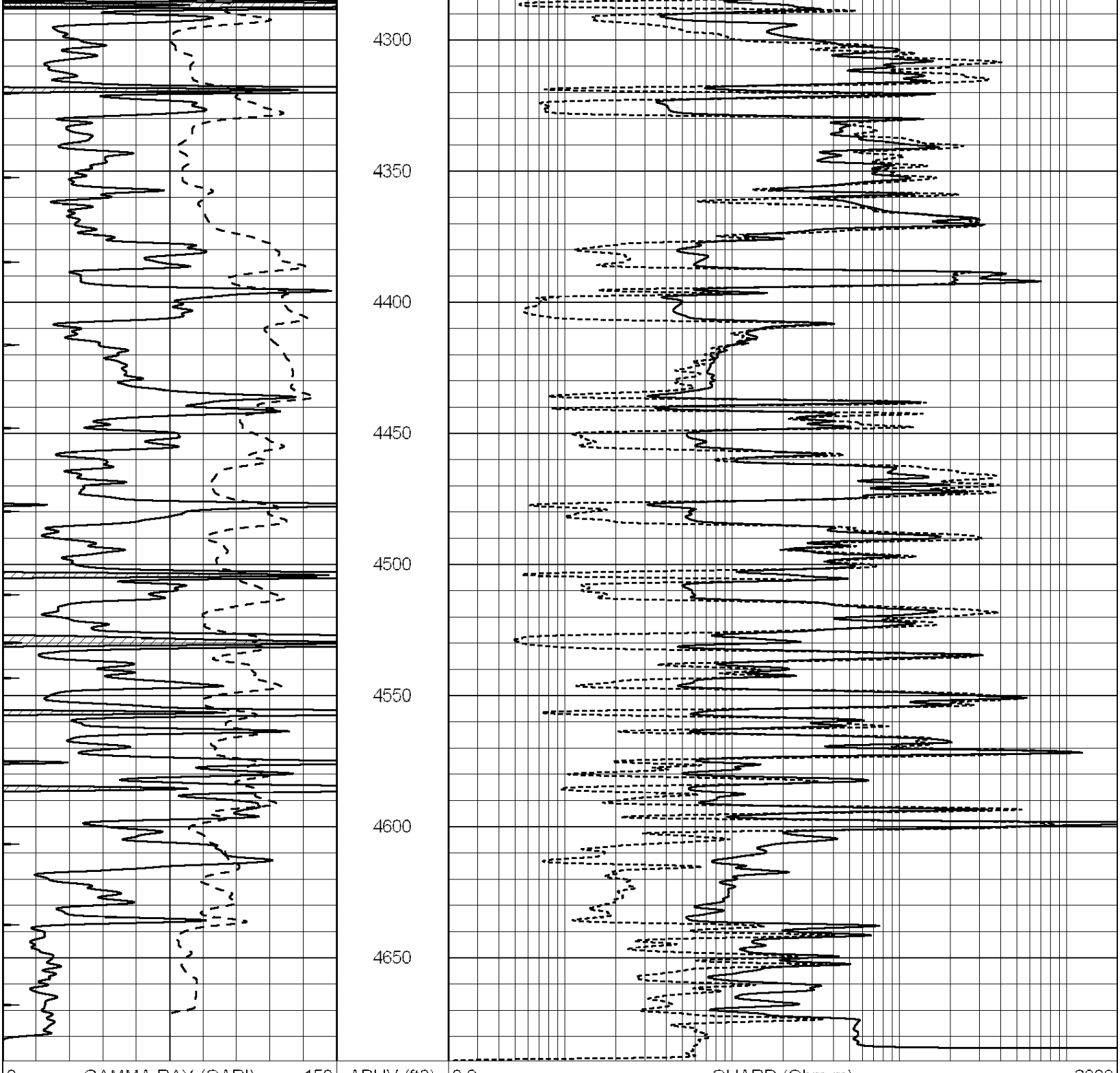

1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050


2100
2150
2200
2250
2300
2350
2400
2450
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
3850
3900
3950
4000
4050
4100
4150
4200
4250



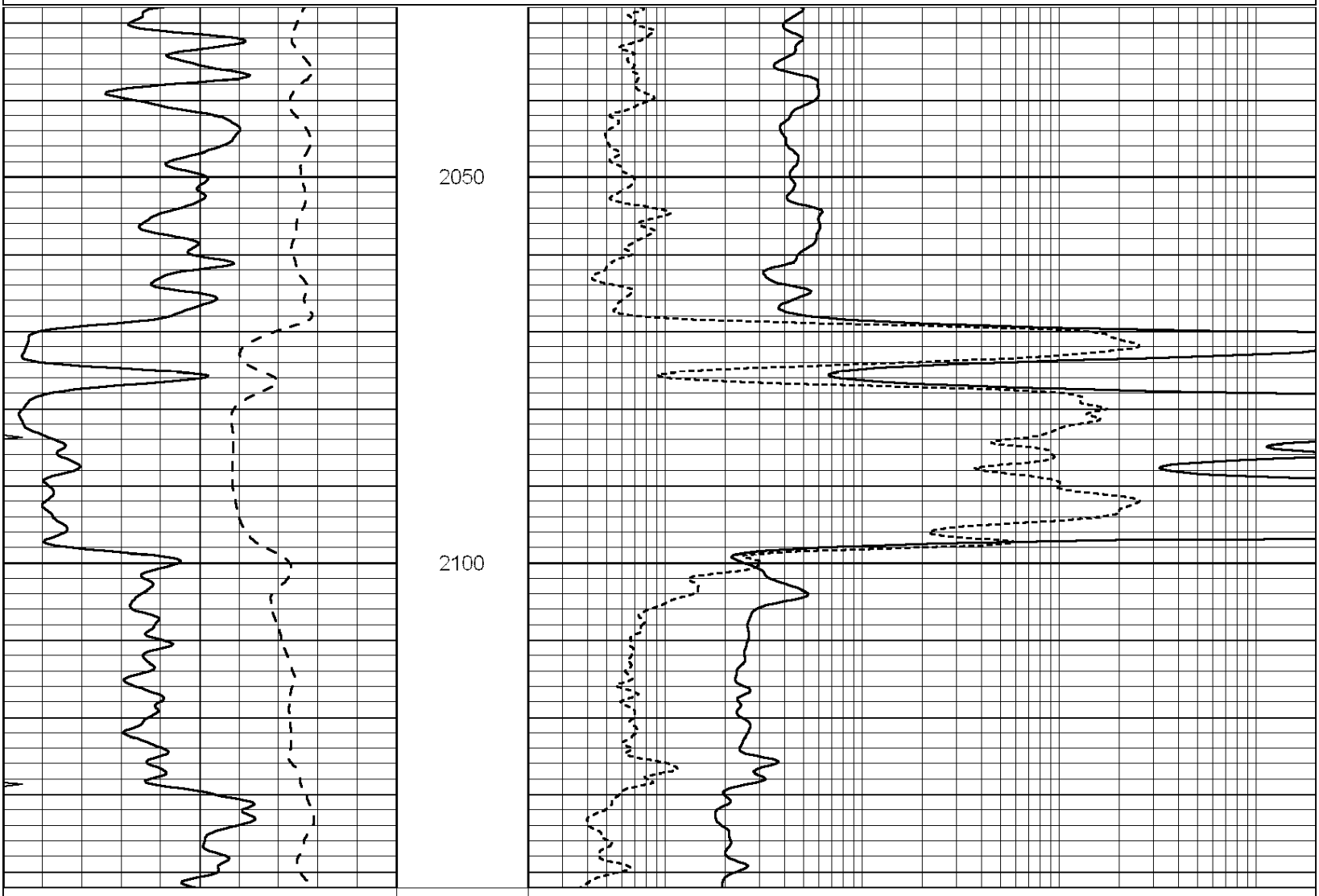
SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 008016rag.db
Dataset Pathname: pass3.1
Presentation Format: rag2

Dataset Creation: Tue Nov 22 19:33:16 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150	ABHV (ft3)	0.2 GUARD (Ohm-m) 2000
-100 SP (mV) 100		0 NEUTRON (NAPI) 1000
	TBHV (ft3)	



0 GAMMA RAY (GAPI) 150	ABHV (ft3)	0.2 GUARD (Ohm-m) 2000
-100 SP (mV) 100		0 NEUTRON (NAPI) 1000
	TBHV (ft3)	

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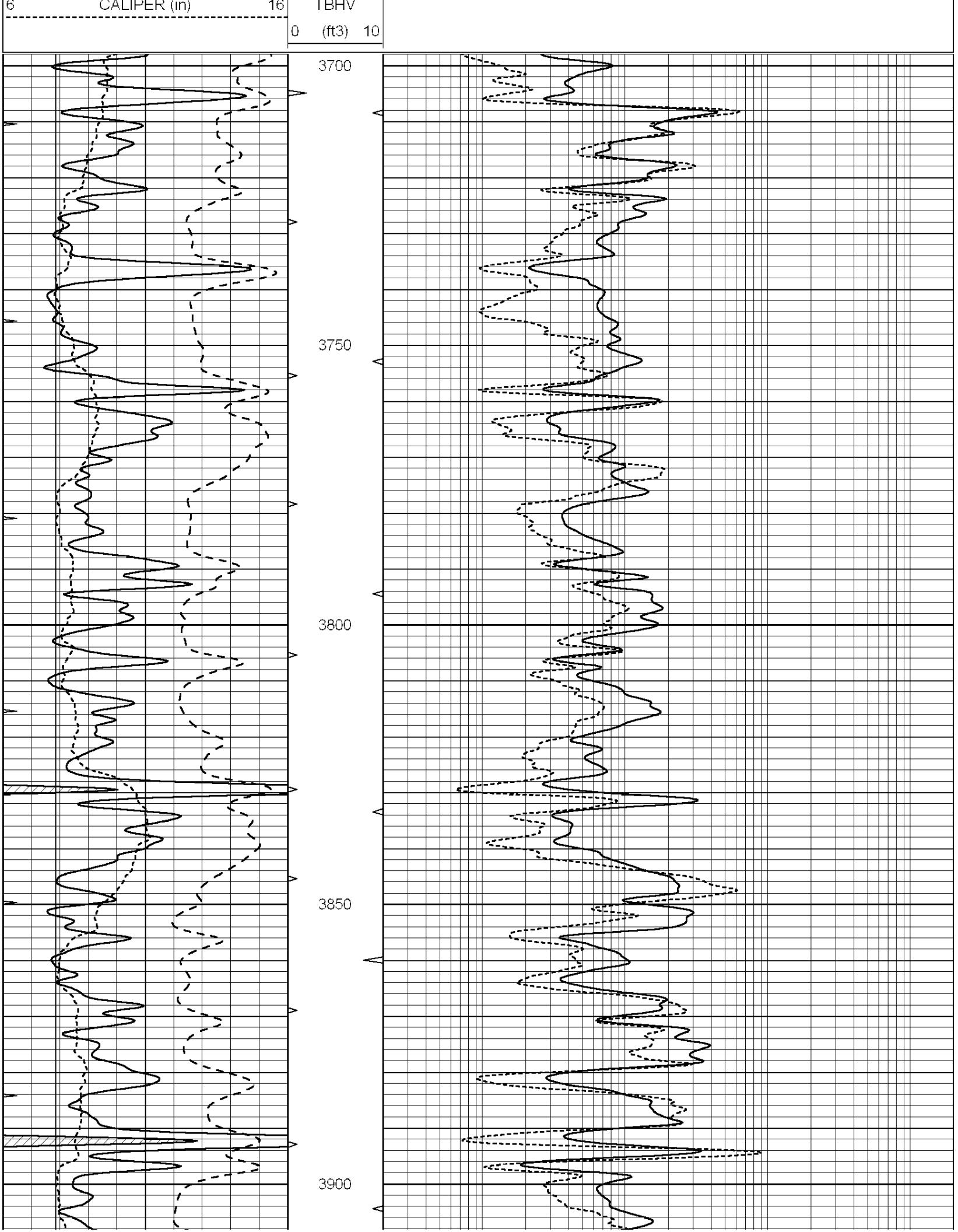
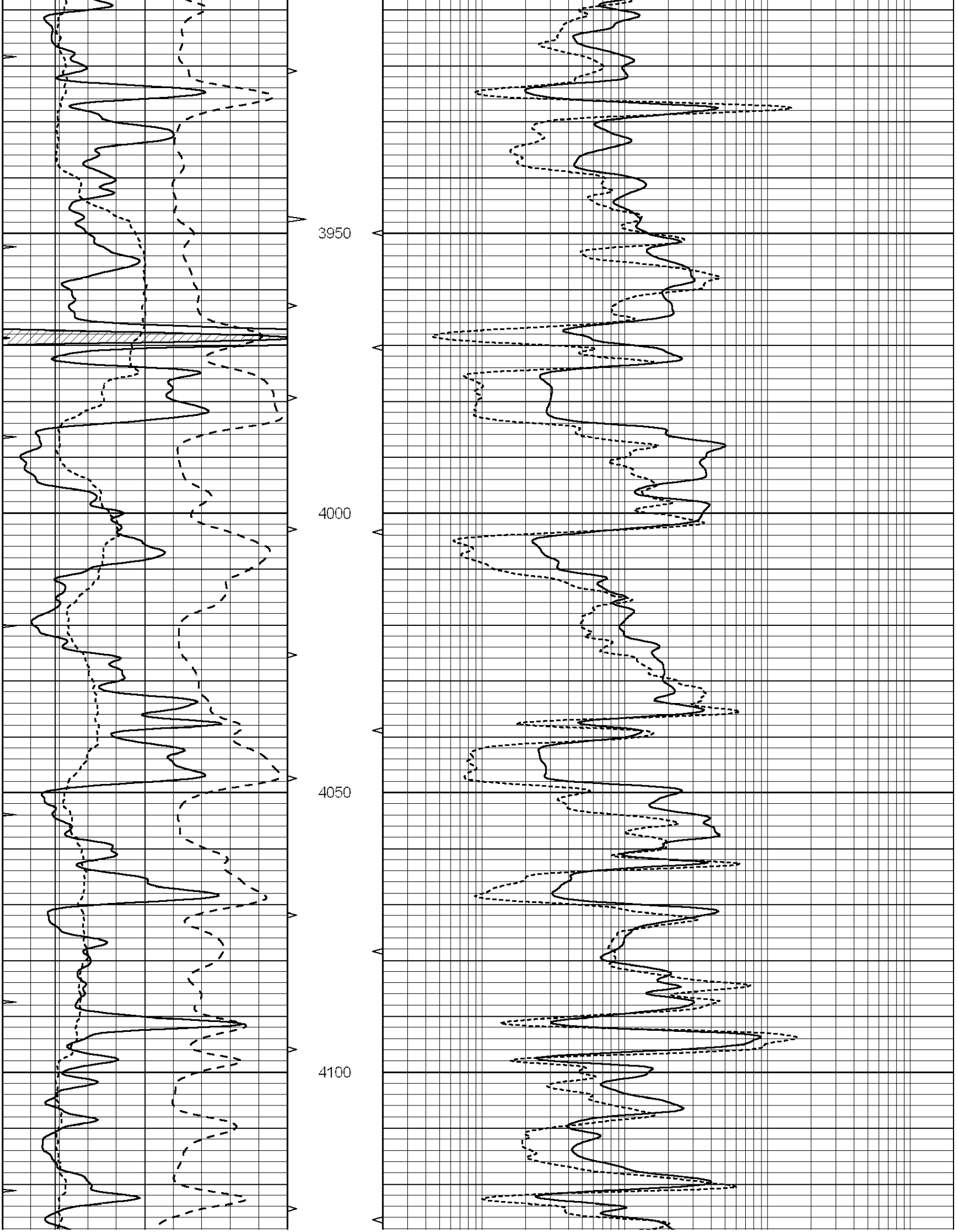
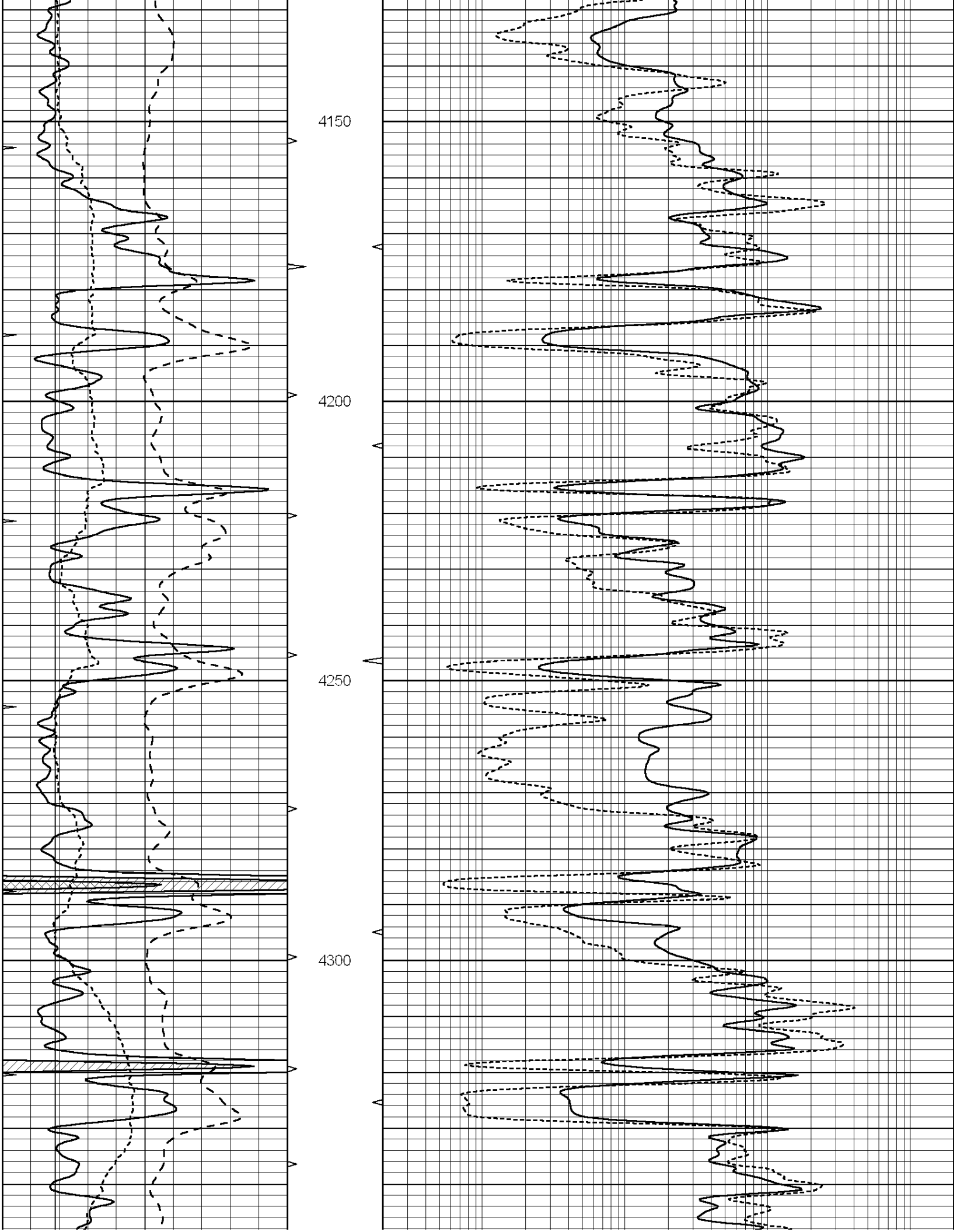
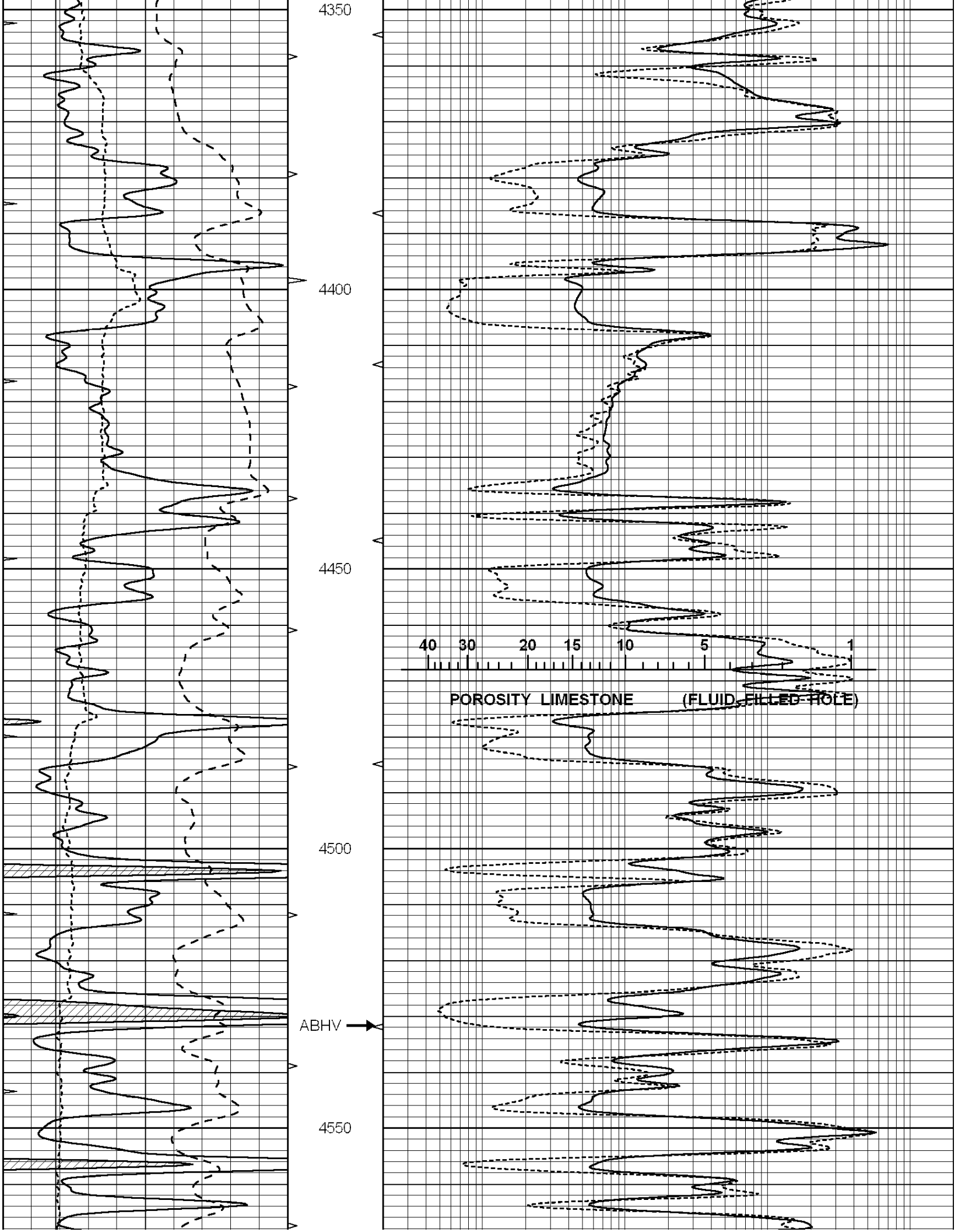
Charted by: Depth in Feet scaled 1:240

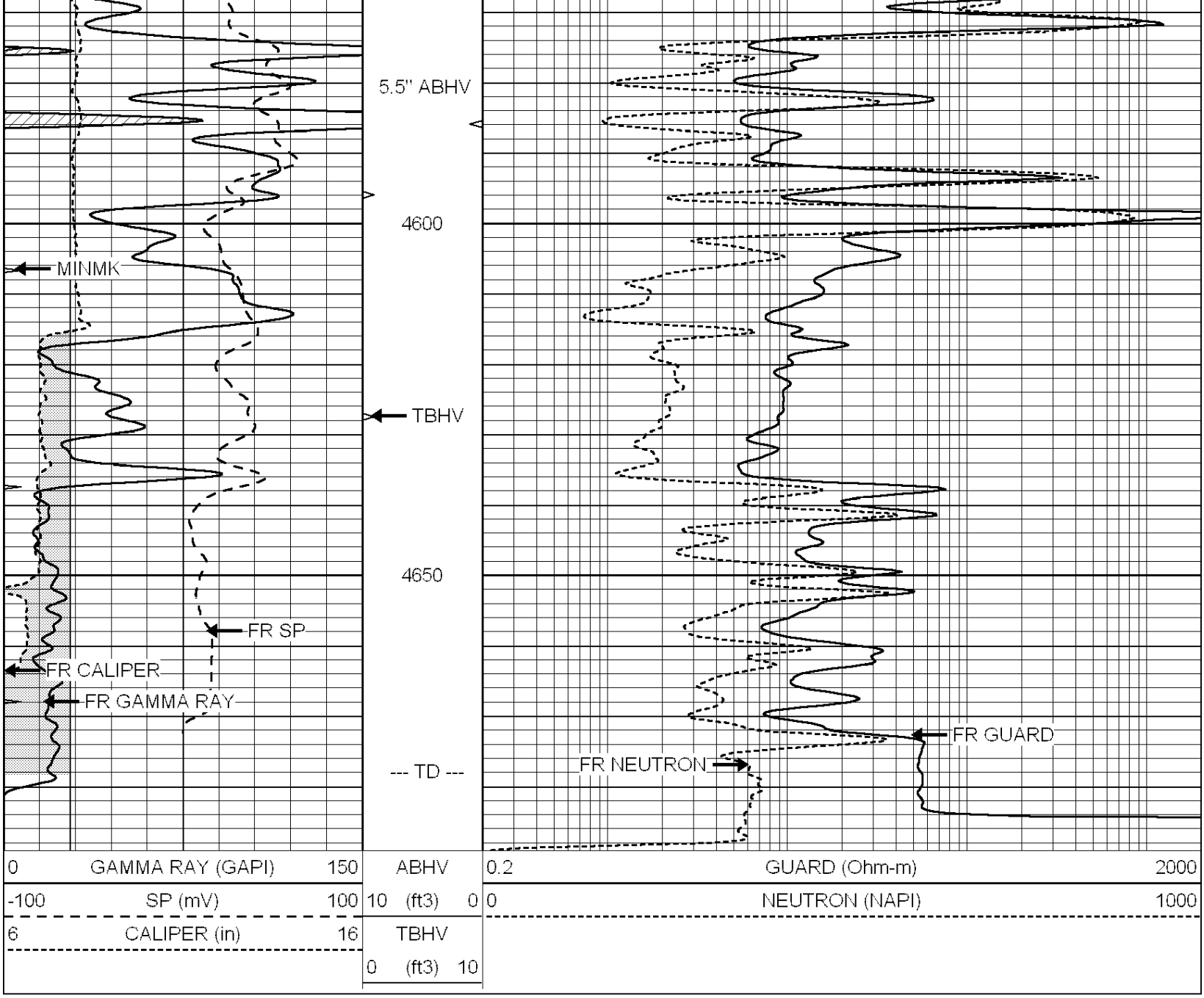
0 GAMMA RAY (GAPI) 150	ABHV	0.2 GUARD (Ohm-m) 2000
-100 SP (mV) 100	10 (ft3) 0	0 NEUTRON (NAPI) 1000


6
CALIPER (in)
16
TBHV
0
(ft3)
10
3700
3750
3800
3850
3900


3950
4000
4050
4100


4150
4200
4250
4300


4350
4400
4450
40
30
20
15
10
5
1
POROSITY LIMESTONE
(FLUID-FILLED HOLE)
4500
ABHV
4550



Calibration Report

Database File: 008016rag.db
Dataset Pathname: pass3.1
Dataset Creation: Tue Nov 22 19:33:16 2011 by Calc Open-Cased 090629

Neutron Calibration Report

Serial Number:	RAG1		
Tool Model:	RAG		
Performed:	Tue Nov 22 17:05:17 2011		
Calibrator Values:	0	1	NAPI
Calibrator Readings:	0	1	cps
Sensitivity:	1.5	NAPI/cps	

Micro Spherically Focused Log Calibration Report

Serial-Model:	RAG1-A
Performed:	Tue Nov 22 18:13:25 2011

Readings	References	Results

	Low	High		Low	High		m	b
Conductivity	0.0110	0.9000	V	10.0000	1000.0000	mmho	1800.0000	-6.0000
Caliper	0.2401	0.3178	V	8.4000	17.0000	in	110.6850	-18.1799

Gamma Ray Calibration Report

Serial Number:	RAG1	
Tool Model:	RAG	
Performed:	Tue Nov 22 17:04:58 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.9	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.8000	GAPI/cps