



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

DUAL INDUCTION LOG

Company	CHARTER ENERGY, INC.		
Well	VONFELDT #1		
Field	WILDCAT		
County	ELLIS	State	KANSAS
Location:	APL # : 15-051-26675-0000		Other Services CDL/CNL MEL
2970' FSL & 1478' FWL W/2 - SW - SE - NW			
Permanent Datum	GROUND LEVEL	Elevation	1963
Log Measured From	KELLY BUSHING 6' A.G.L.		
Drilling Measured From	KELLY BUSHING		
SEC 18 TWP 15S RGE 16W			
Date	3/23/14		
Run Number	ONE		
Depth Driller	3625		
Depth Logger	3624		
Bottom Logged Interval	3622		
Top Log Interval	00		
Casing Driller	8 5/8" @ 1096'		
Casing Logger	1098		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,700 PPM	
Density / Viscosity	9.5/52		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.800 @ 60F		
Rmf @ Meas. Temp	.600 @ 60F		
Rmc @ Meas. Temp	.960 @ 60F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.425 @ 113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	12:45 A.M.		
Maximum Recorded Temperature	113F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KURT TALBOTT		

<<< Fold Here >>>

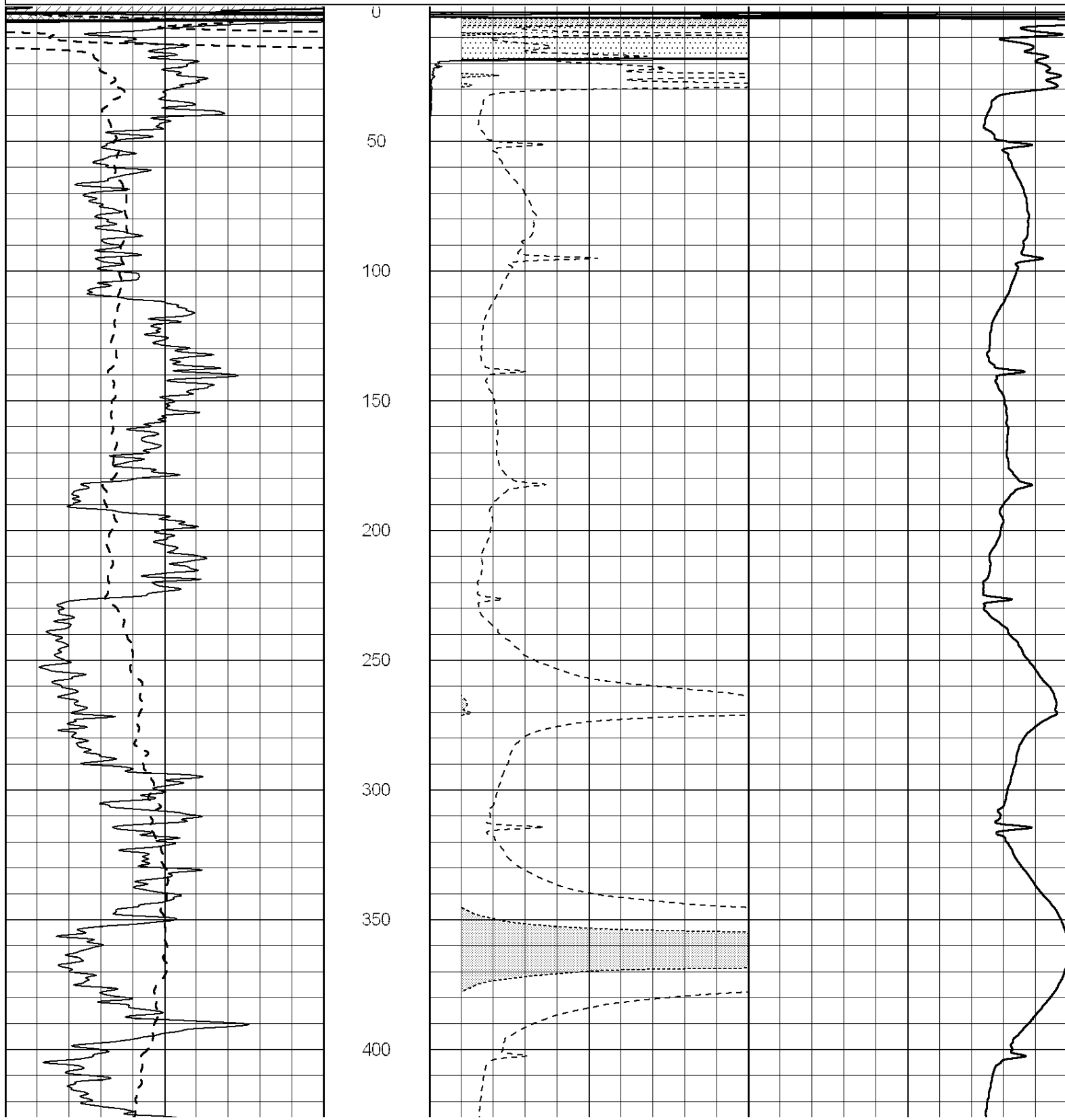
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

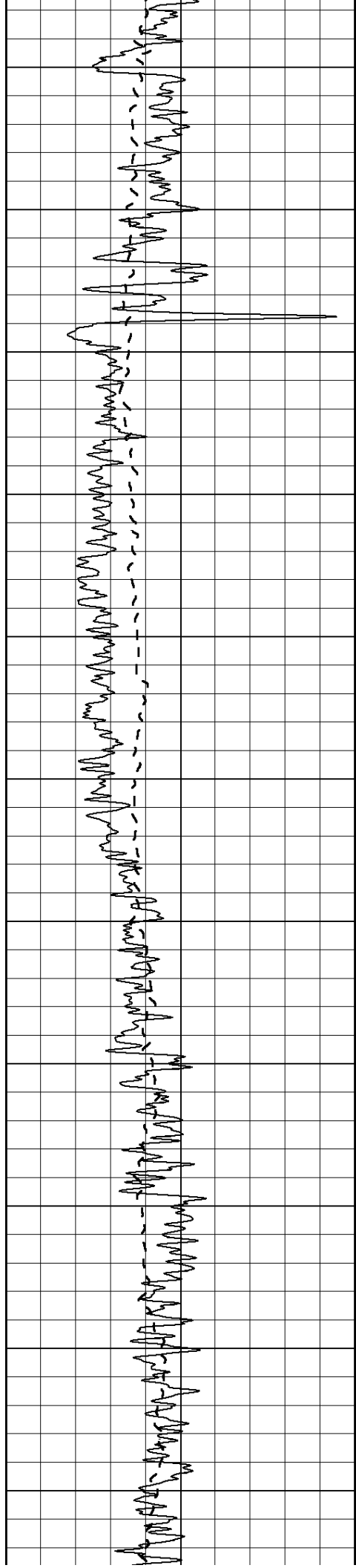
Comments

THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS
VICTORIA, KS., 6 1/2S. ON "PFEIFER BLKTOP", E. INTO

Database File: 22271ddn.db
 Dataset Pathname: pass3.2
 Presentation Format: dil2
 Dataset Creation: Mon Mar 24 01:50:55 2014 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50
-100	SP (mV)	100	0	RILD (Ohm-m)	50
-----			-----		
			1000	CILD (mmho/m)	0
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500





450

500

550

600

650

700

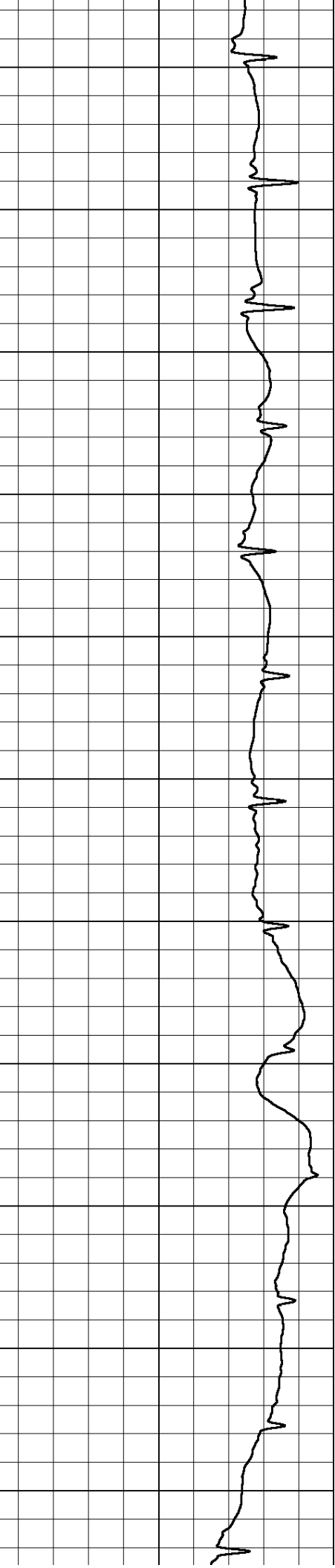
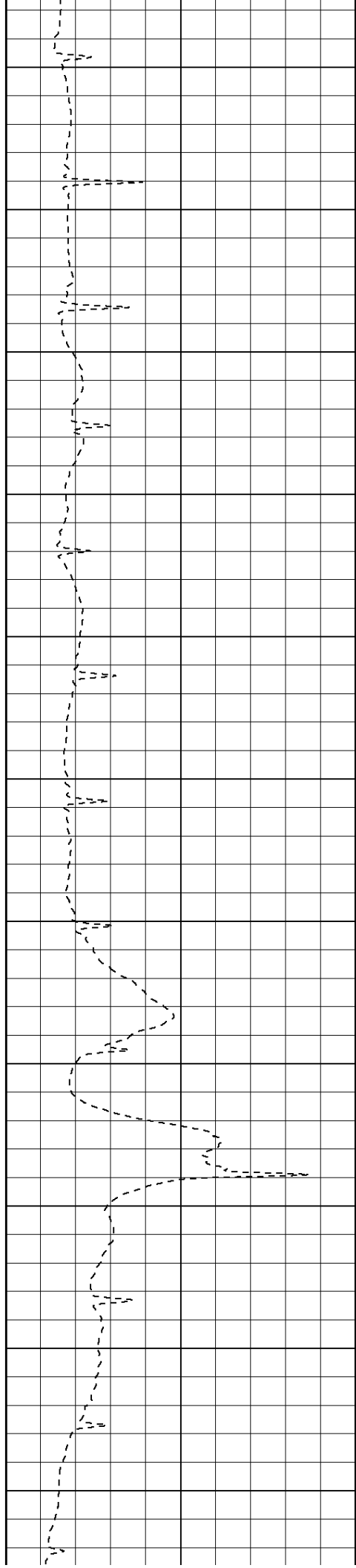
750

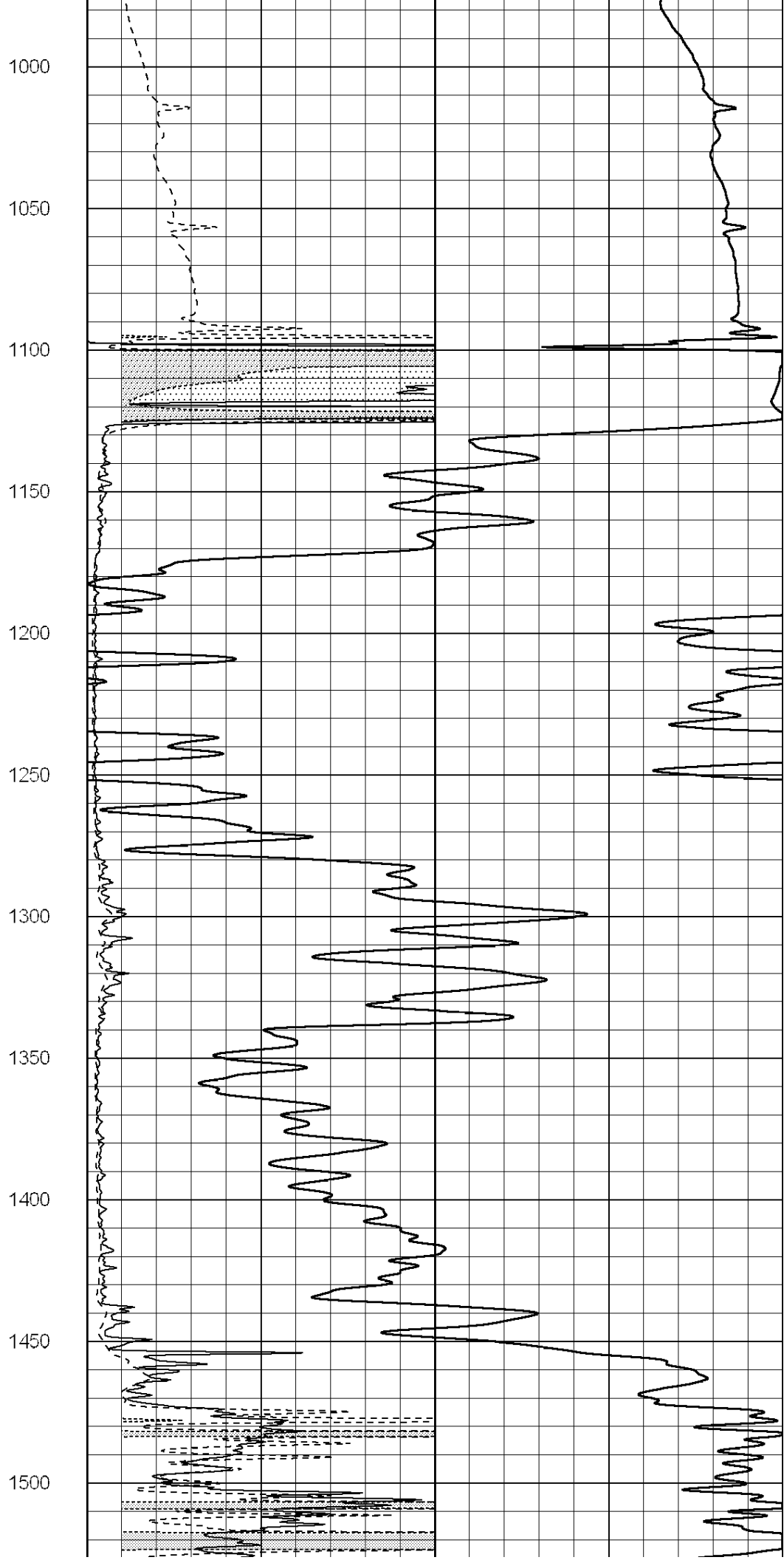
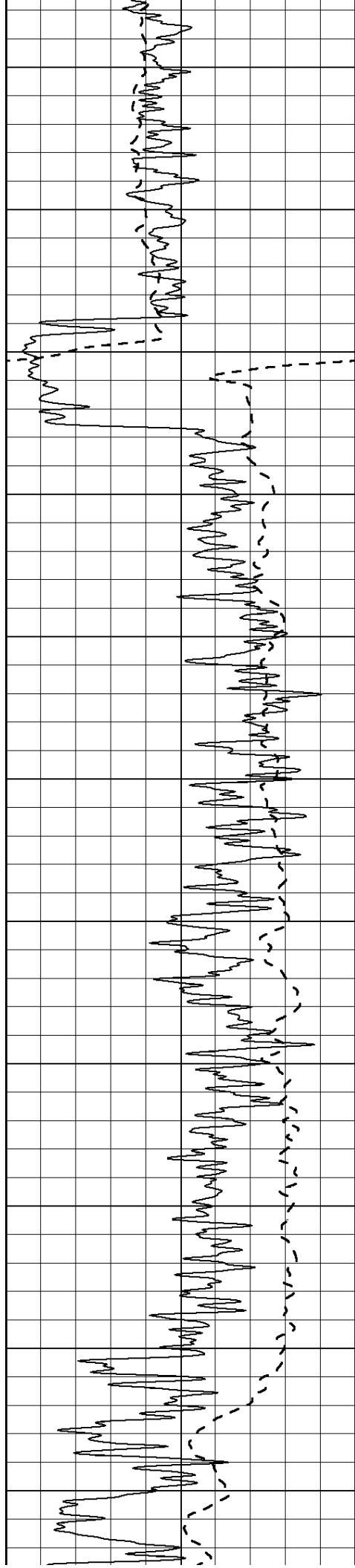
800

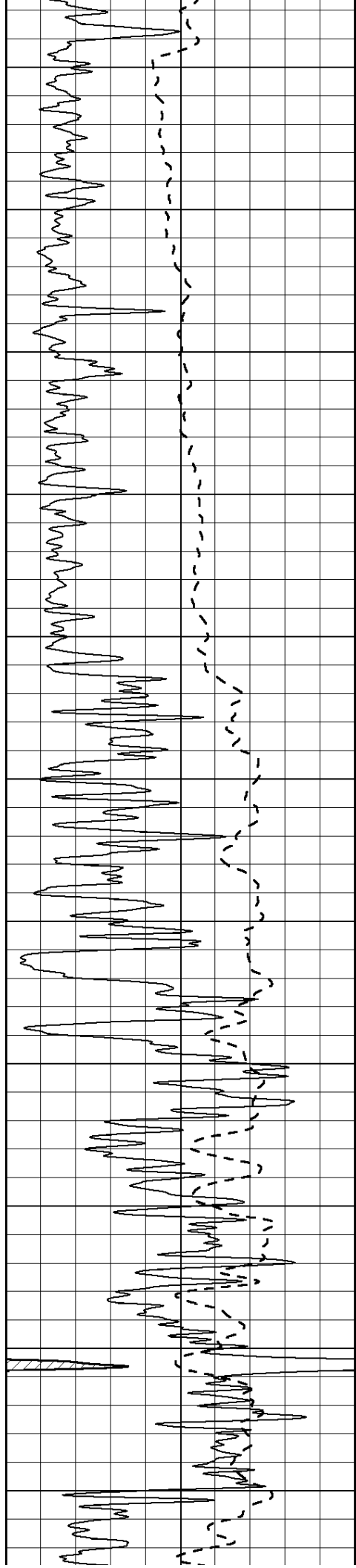
850

900

950







1550

1600

1650

1700

1750

1800

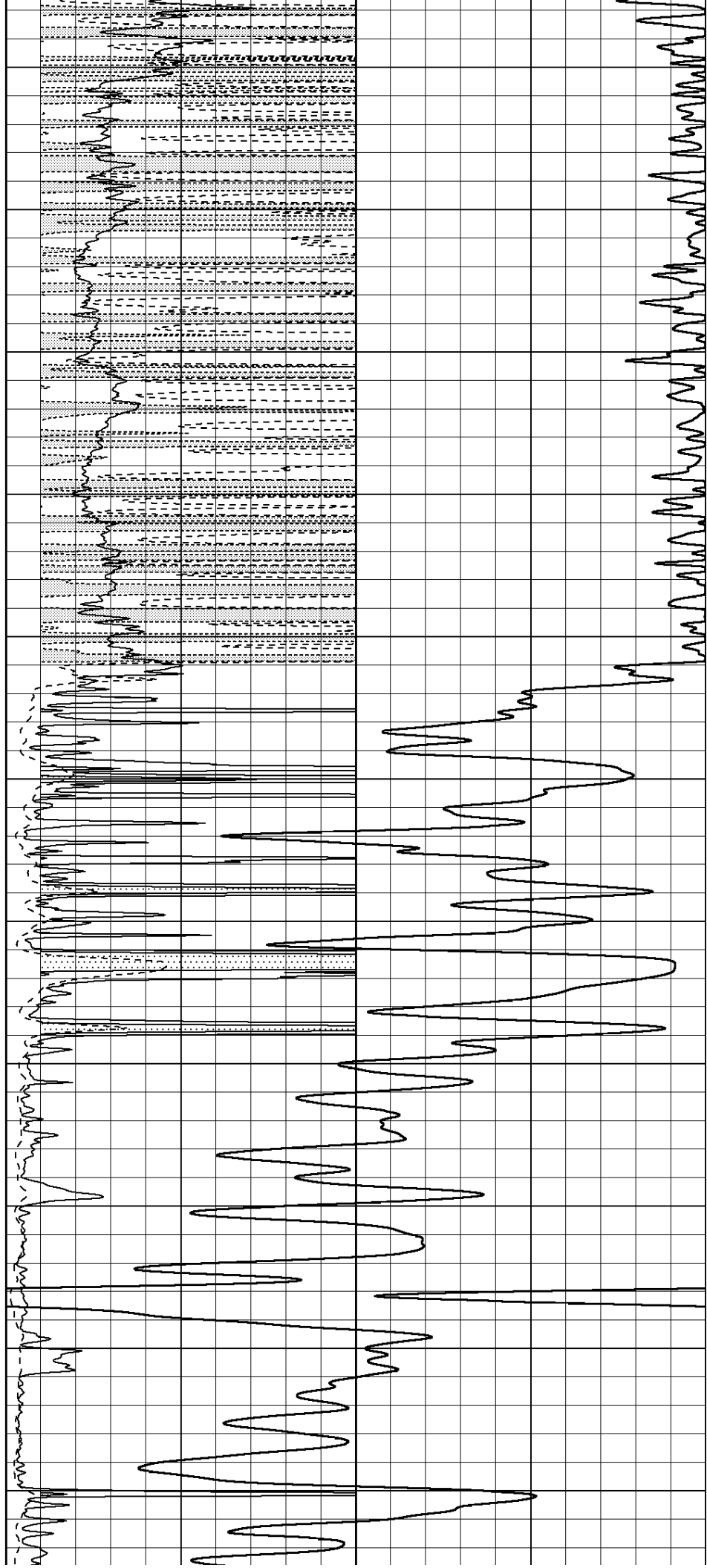
1850

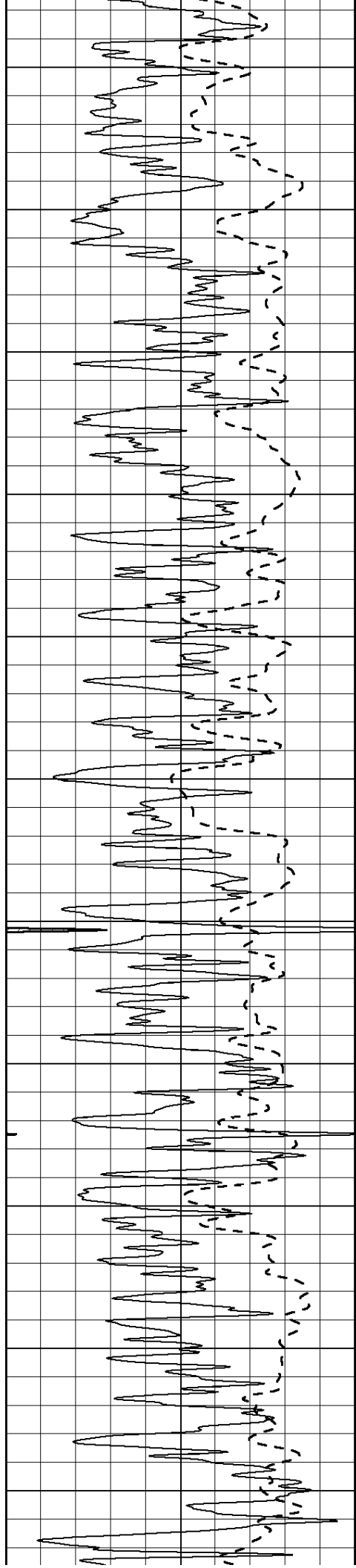
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

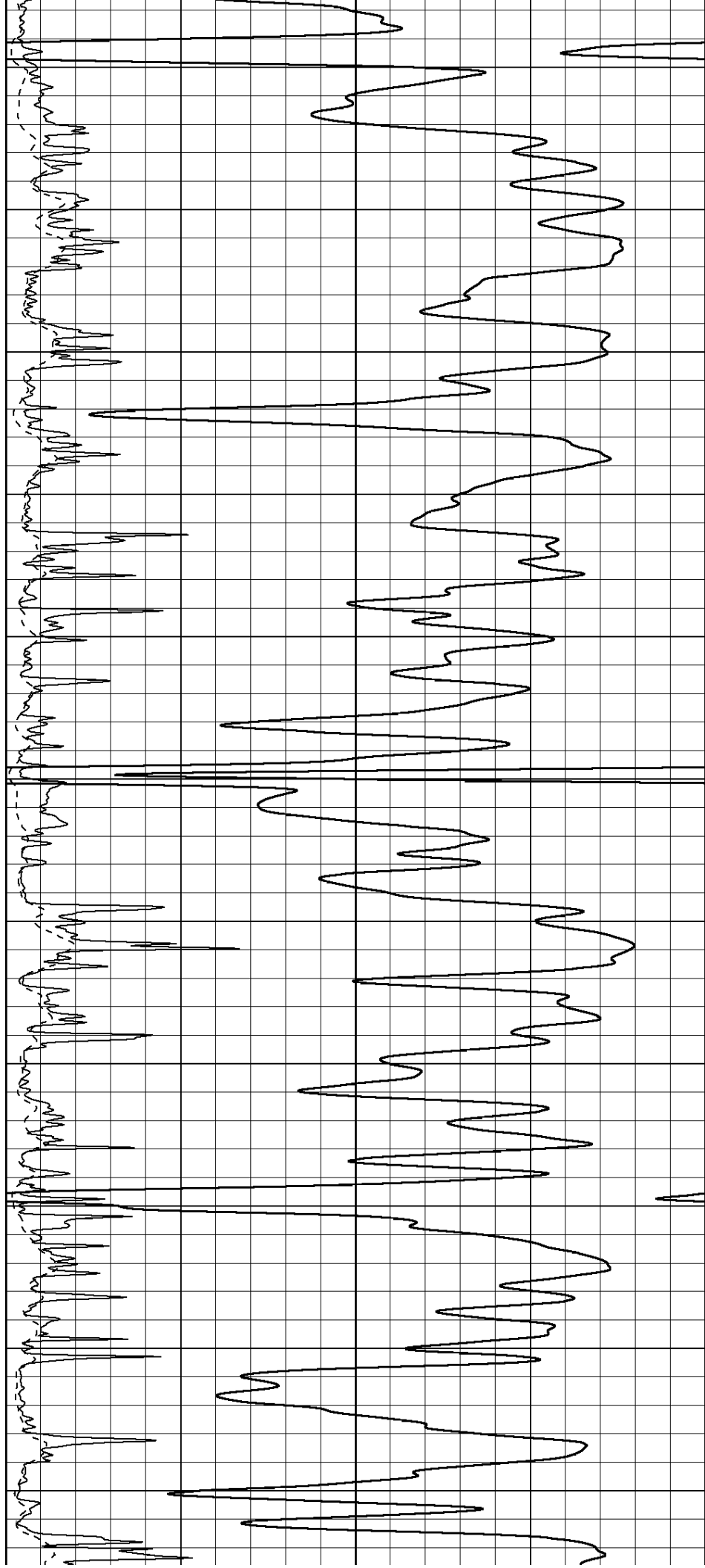
2400

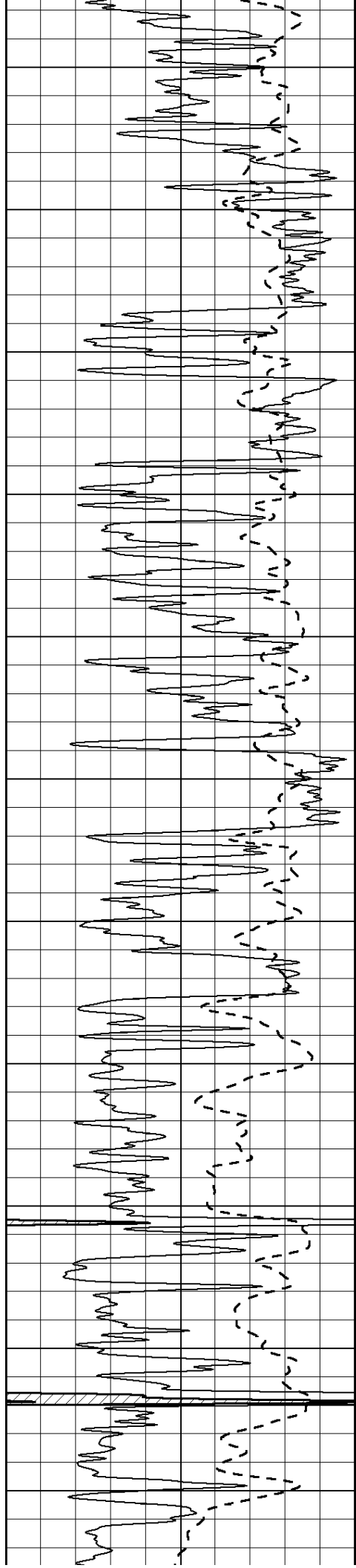
2450

2500

2550

2600





2650

2700

2750

2800

2850

2900

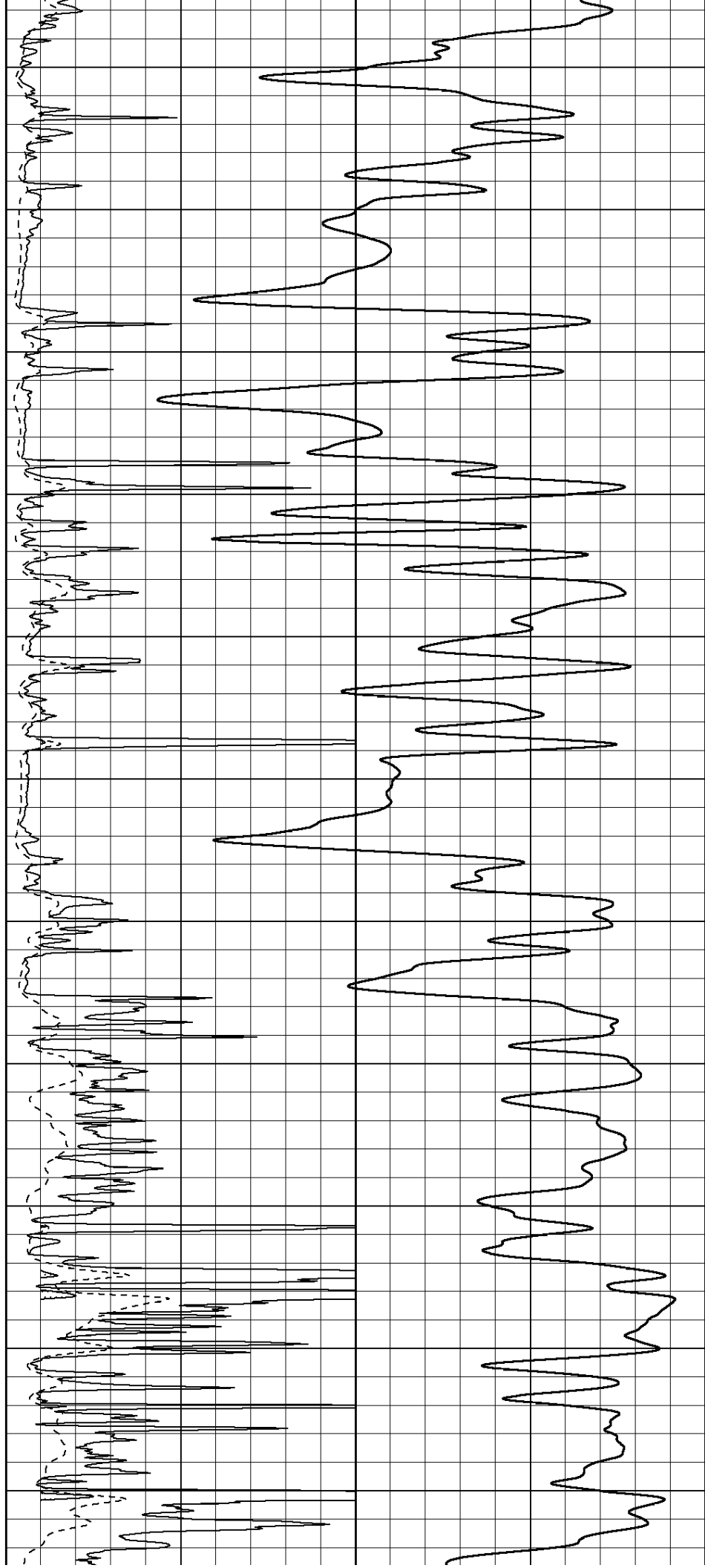
2950

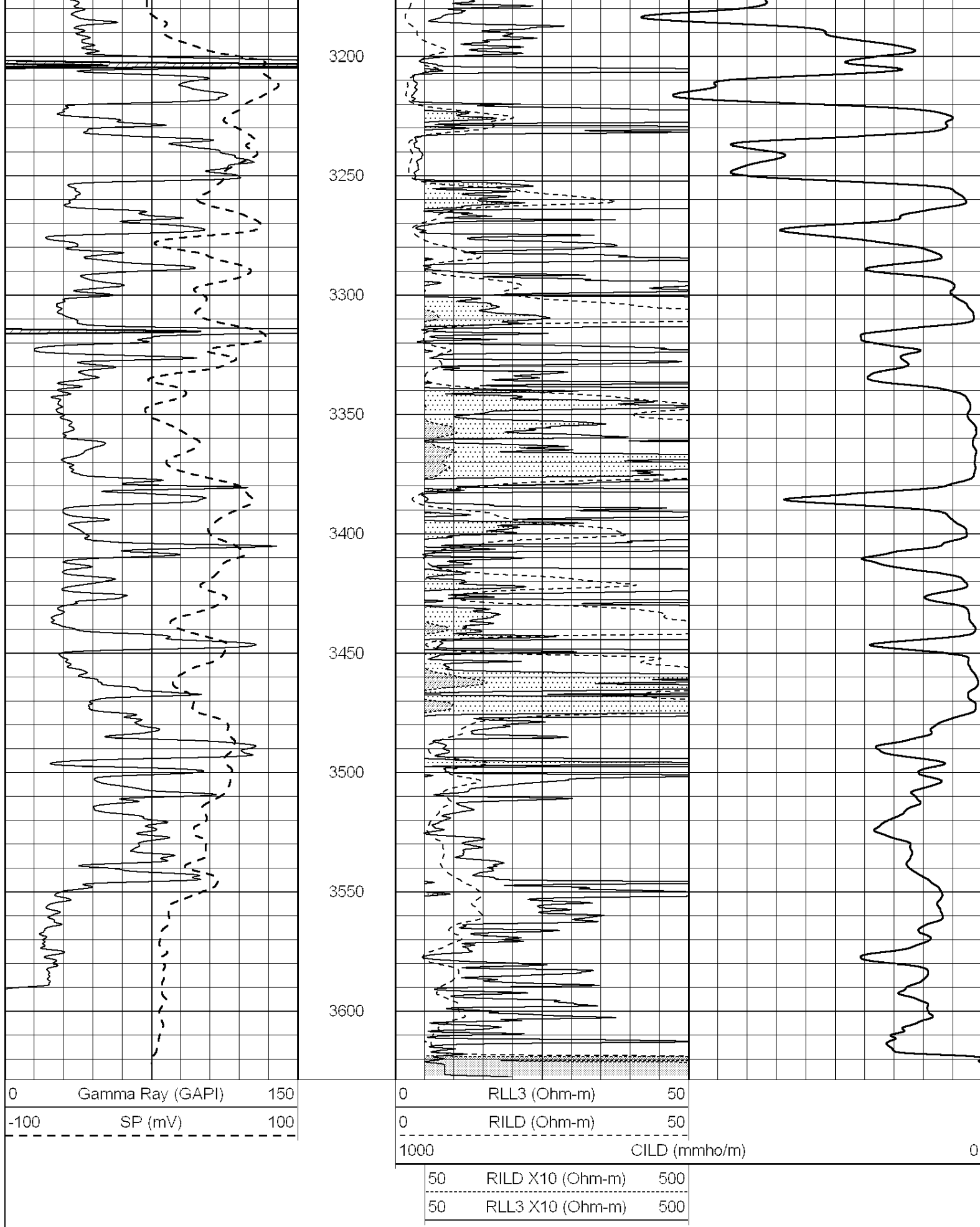
3000

3050

3100

3150

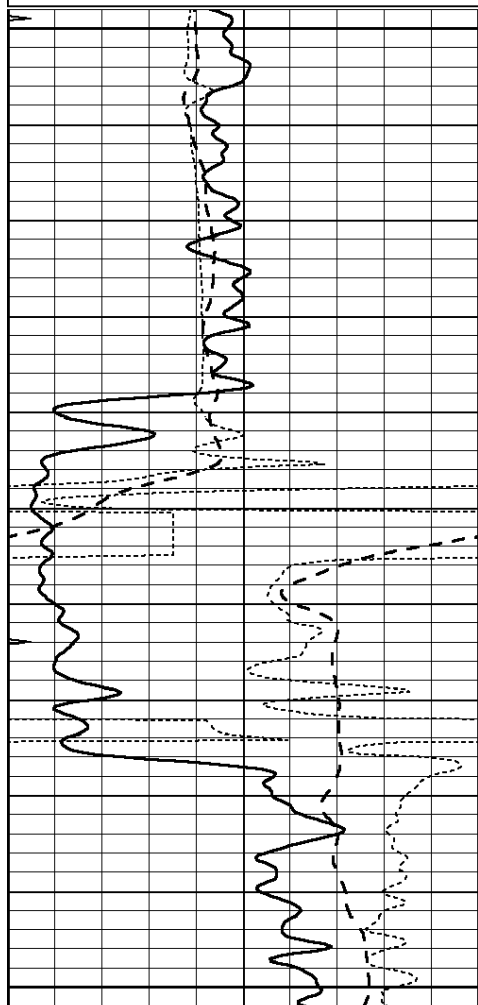




Database File: 22271ddn.db
Dataset Pathname: pass3.3
Presentation Format: _dil
Dataset Creation: Mon Mar 24 01:52:05 2014 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



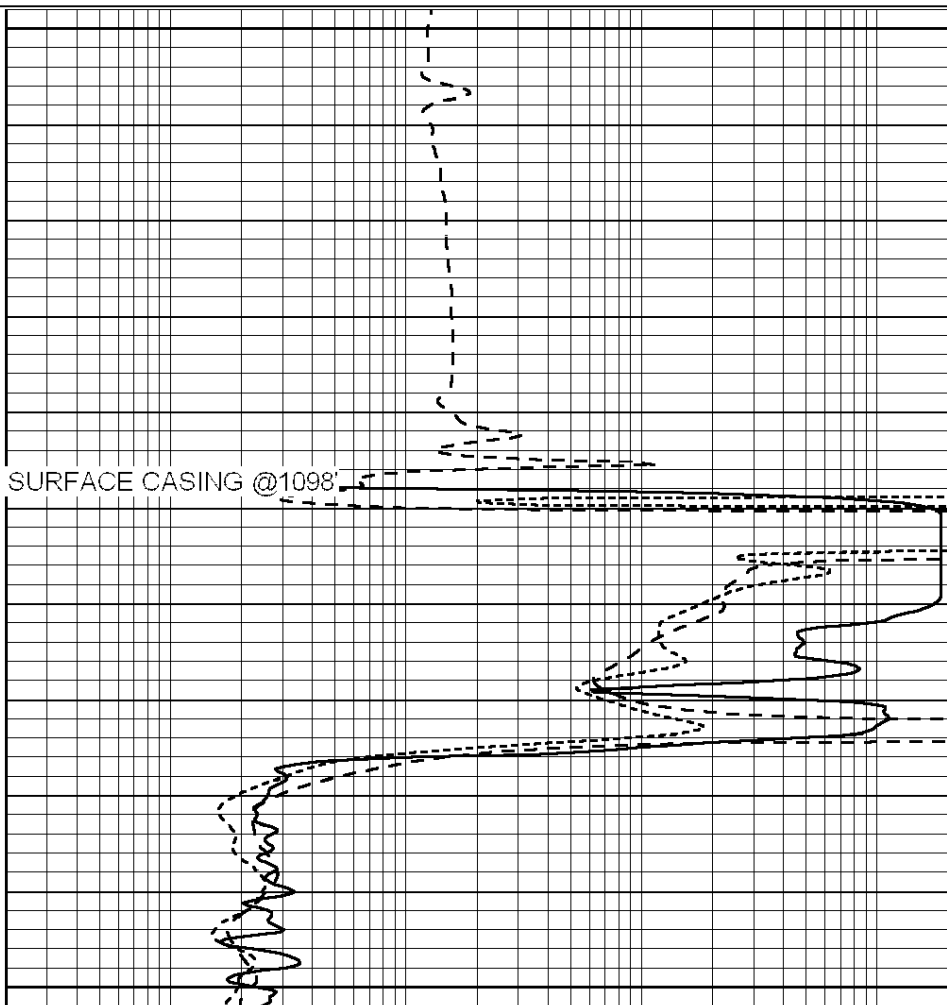
1050

8 5/8" SURFACE CASING @1098'

1100

1150

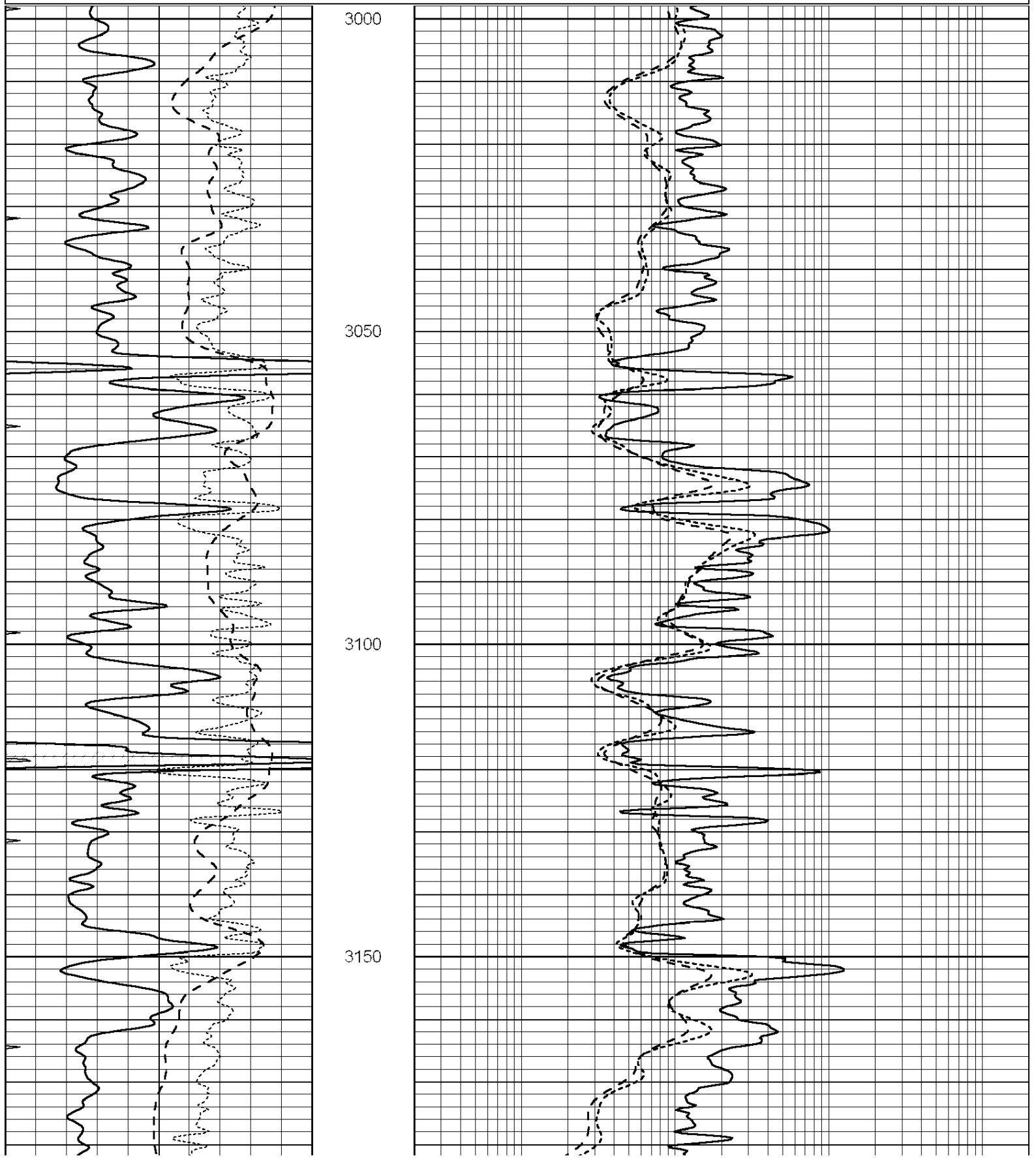
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

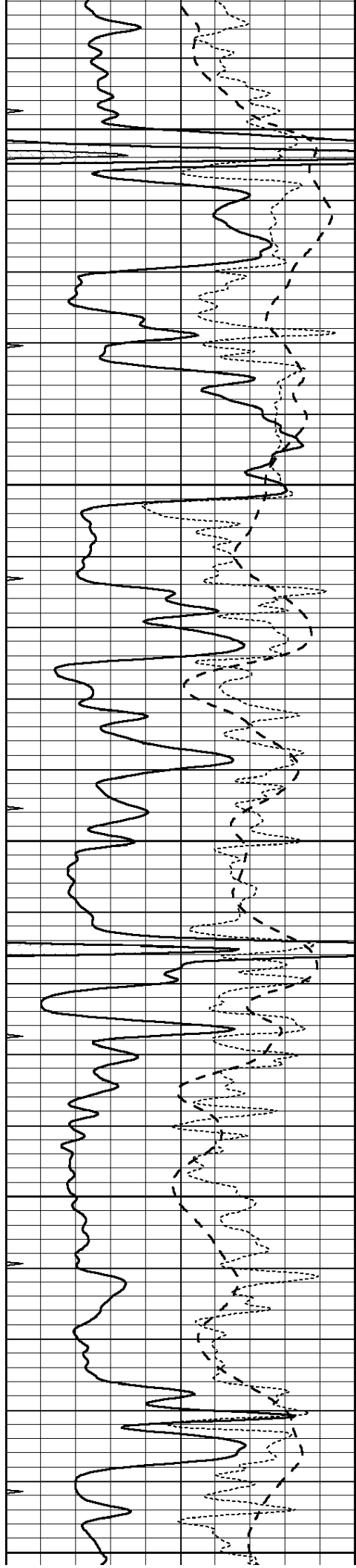


0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			





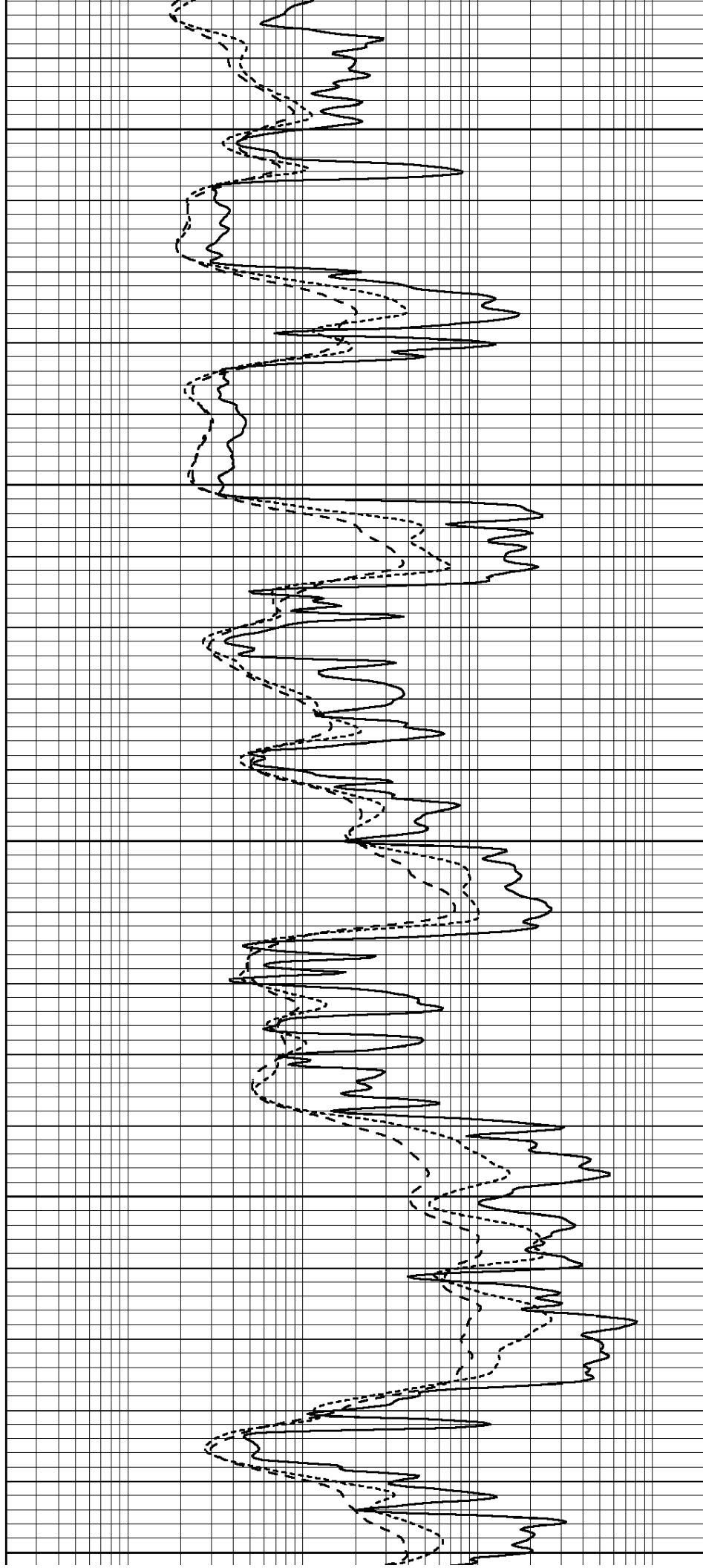
3200

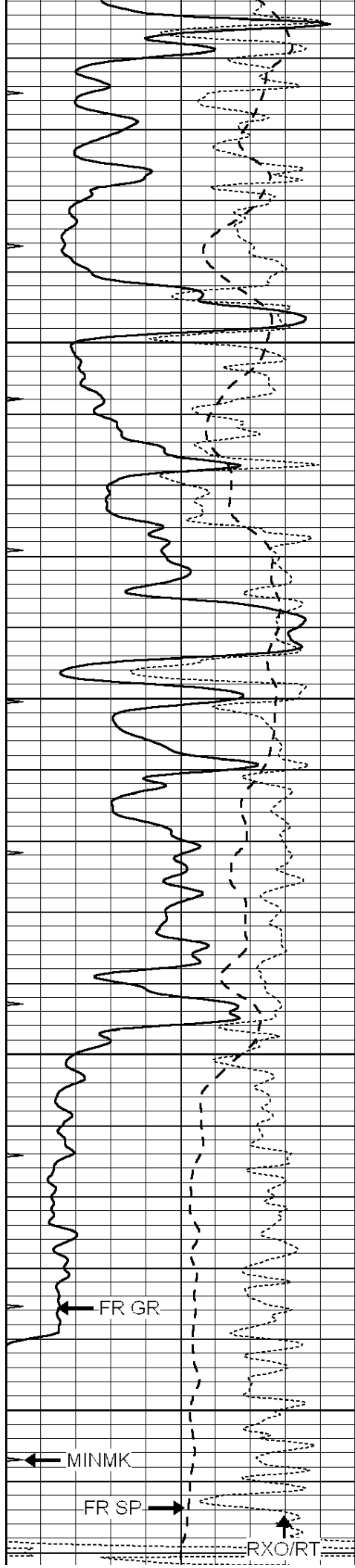
3250

3300

3350

3400



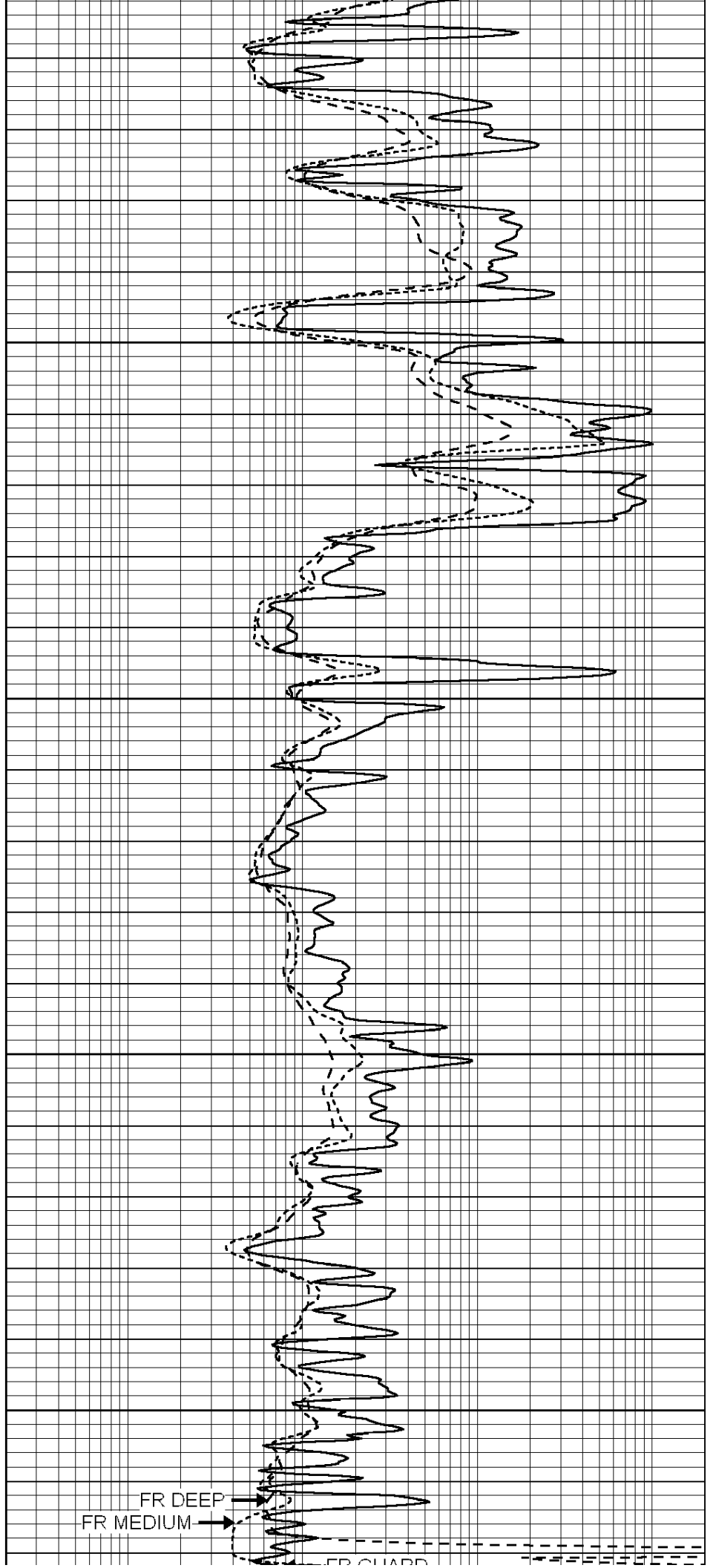


3450

3500

3550

3600



FR DEEP
FR MEDIUM

FR SHARP

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

LTD 3624

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

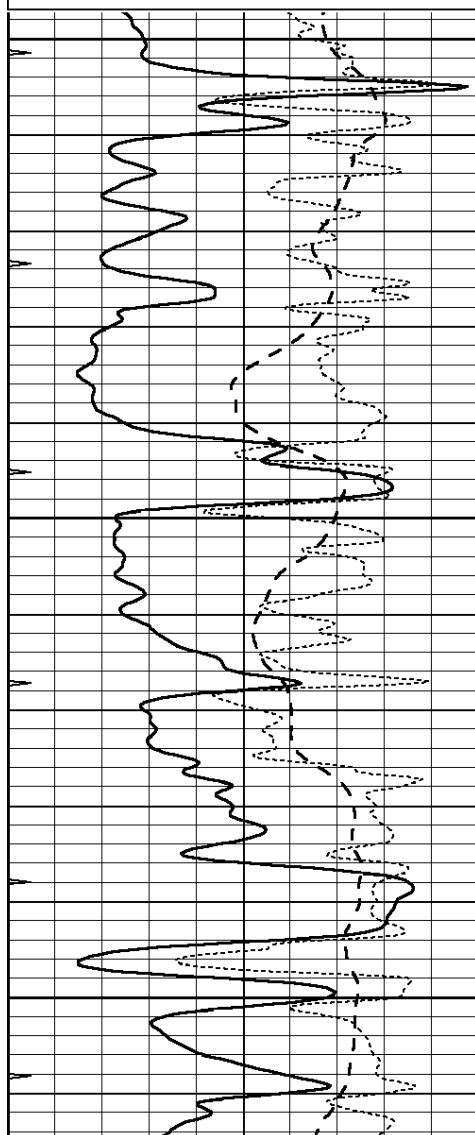


REPEAT SECTION

Database File: 22271ddn.db
 Dataset Pathname: pass2.5
 Presentation Format: _dil
 Dataset Creation: Mon Mar 24 01:16:14 2014 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

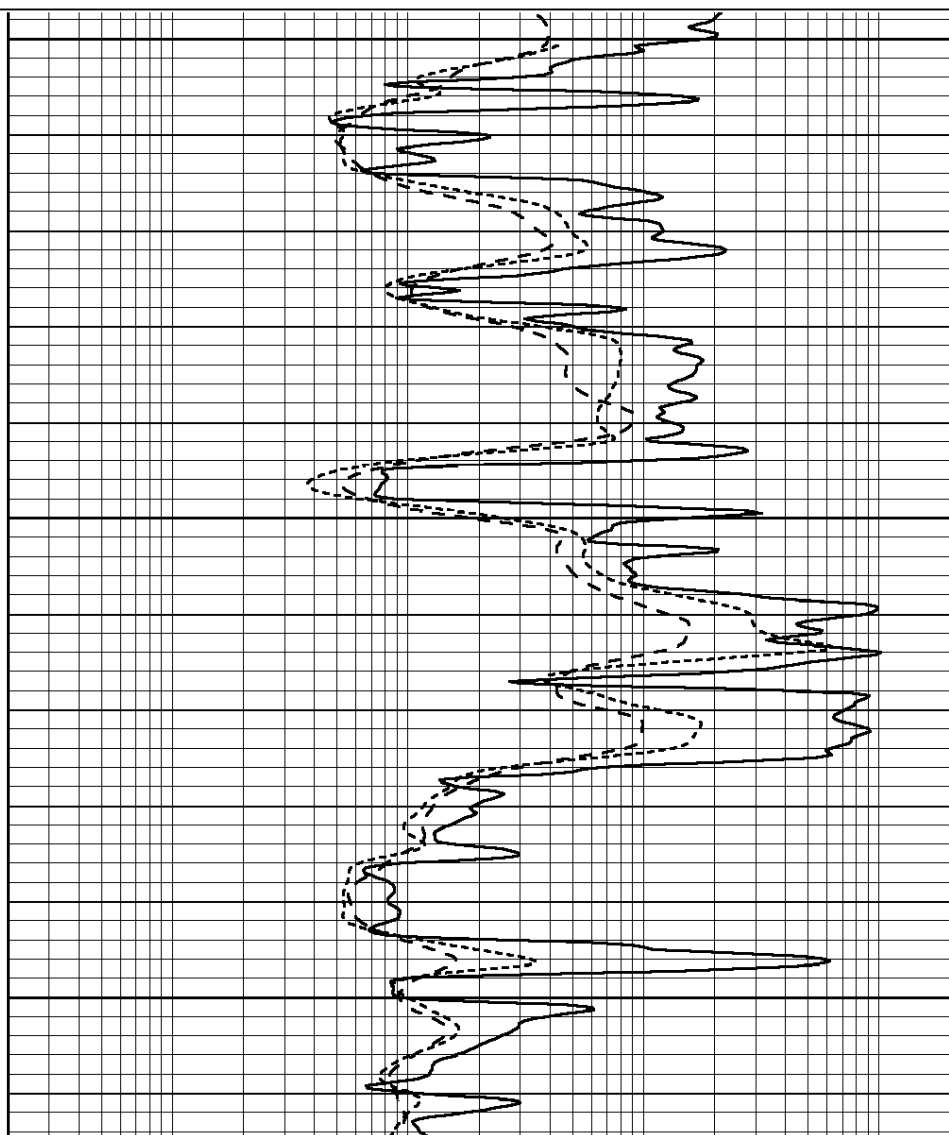
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

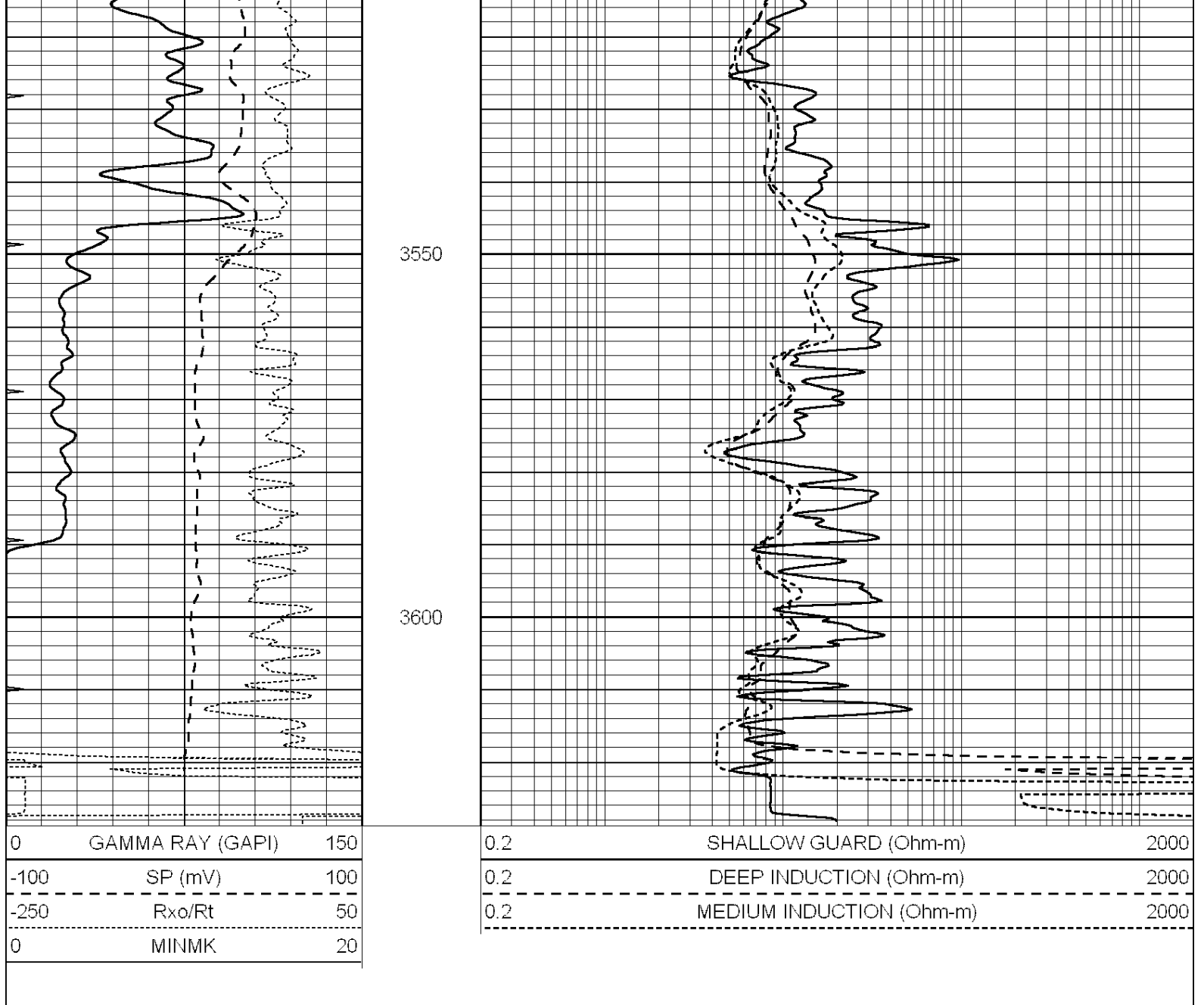


3400

3450

3500





Calibration Report								
Database File:		22271ddn.db						
Dataset Pathname:		pass3.2						
Dataset Creation:		Mon Mar 24 01:50:55 2014 by Calc SOC 120430						
Dual Induction Calibration Report								
Serial-Model:		PROBE9-DILG						
Surface Cal Performed:		Sat Mar 08 04:15:46 2014						
Downhole Cal Performed:		Mon Jul 28 12:02:56 2008						
After Survey Verification Performed:		Mon Jul 28 12:02:56 2008						
Surface Calibration								
		Readings			References		Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	650.000	-12.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	660.000	-20.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.035	0.712	V	0.000	464.000	mmho/m	655.077	-8.100

Medium	0.003	0.712	V	0.000	484.000	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		

Litho Density Calibration Report								
Serial: 003N Model: PRB								

Master Calibration					Performed Tue Sep 08 14:14:44 2009			
	Background		Magnesium		Aluminum		Sandstone	
Window 1	2042.6		12312.8		4225.8		13758.4	cps
Window 2	1855.8		10134.7		3624.2		11113.1	cps
Window 3	1639.4		6760.2		2716.3		7260.3	cps
Window 4	466.4		469.2		466.1		476.5	cps
Long Space	0.0		8278.9		1768.4		9257.4	cps
Short Space	2.2		2377.3		1544.1		2574.2	cps
Rho			1.7100		2.5900		1.3800	g/cc
Pe			0.0000		2.5700		1.5500	
Rib Angle	: 44.4		Rib Slope	: 0.979	Density/Spine Ratio			: 0.549
Spine Angle	: 74.4		Spine Slope	: 3.577	Spine Intercept			: -18.8

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0		0.0		0.0		0.0	cps
Window 2	0.0		0.0		0.0		0.0	cps
Window 3	0.0		0.0		0.0		0.0	cps
Window 4	0.0		0.0		0.0		0.0	cps
Long Space	0.0		0.0		0.0		0.0	cps
Short Space	0.0		0.0		0.0		0.0	cps
Measured Rho			0.0000		0.0000		0.0000	g/cc
Measured Correction			0.0000		0.0000		0.0000	g/cc
Measured Pe					0.0000		0.0000	

After Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0		0.0		0.0		0.0	cps
Window 2	0.0		0.0		0.0		0.0	cps
Window 3	0.0		0.0		0.0		0.0	cps
Window 4	0.0		0.0		0.0		0.0	cps
Long Space	0.0		0.0		0.0		0.0	cps
Short Space	0.0		0.0		0.0		0.0	cps
Measured Rho			0.0000		0.0000		0.0000	g/cc

Measured Correction	0.0000	0.0000	0.0000	g/cc
Measured Pe		0.0000	0.0000	
Compensated Neutron Calibration Report				
Serial Number:		070808		
Tool Model:		Probe		
PRE-SURVEY VERIFICATION				
Detector	Readings	Measured	Target	
Short Space	cps			
Long Space	cps	pu	pu	
POST-SURVEY VERIFICATION				
Detector	Readings	Measured	Target	
Short Space	cps			
Long Space	cps	pu	pu	
Gamma Ray Calibration Report				
Serial Number:		070558		
Tool Model:		OPEN_GR		
Performed:		Thu Mar 20 19:55:46 2014		
Calibrator Value:		1.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		1.0	cps	
Sensitivity:		0.3000	GAPI/cps	