



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company	RAYMOND OIL COMPANY, INC.		
Well	#1 JOAN DEEDS		
Field	WILDCAT		
County	SHERMAN	State	KANSAS
Location:	API # : 15-181-20599-0000 1582' FNL & 787' FEL		Other Services CDL/CNL MEL/SON
SEC 9	TWP 6S	RGE 37W	Elevation
Permanent Datum	GROUND LEVEL	Elevation	K.B. 3400
Log Measured From	KELLY BUSHING 5' A.G.L.		D.F. 3398
Drilling Measured From	KELLY BUSHING		G.L. 3395
Date	9/26/14		
Run Number	ONE		
Depth Driller	5030		
Depth Logger	5030		
Bottom Logged Interval	5028		
Top Log Interval	00		
Casing Driller	8 5/8" @ 303		
Casing Logger	304		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4500 PPM	
Density / Viscosity	9.4/5.1		
pH / Fluid Loss	9.0/10.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.80 @ 85F		
Rmf @ Meas. Temp	.60 @ 85F		
Rmc @ Meas. Temp	.96 @ 85F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	.54 @ 125F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	125F		
Equipment Number	3802		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	KIM SHOEMAKER		

<<< 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 COMPLETION & PRODUCTION SVCS. (785) 628-6395

DIRECTIONS: BREWSTER, KS - NORTH TO COUNTY LINE (WHERE BLKTOP ENDS)
3 WEST - 1 SOUTH - 1 WEST - SOUTH & WEST INTO



**COMPLETION
& PRODUCTION**

MAIN SECTION

Database File: 26225ddn.db
 Dataset Pathname: pass5.3
 Presentation Format: dil2
 Dataset Creation: Fri Sep 26 17:13:39 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

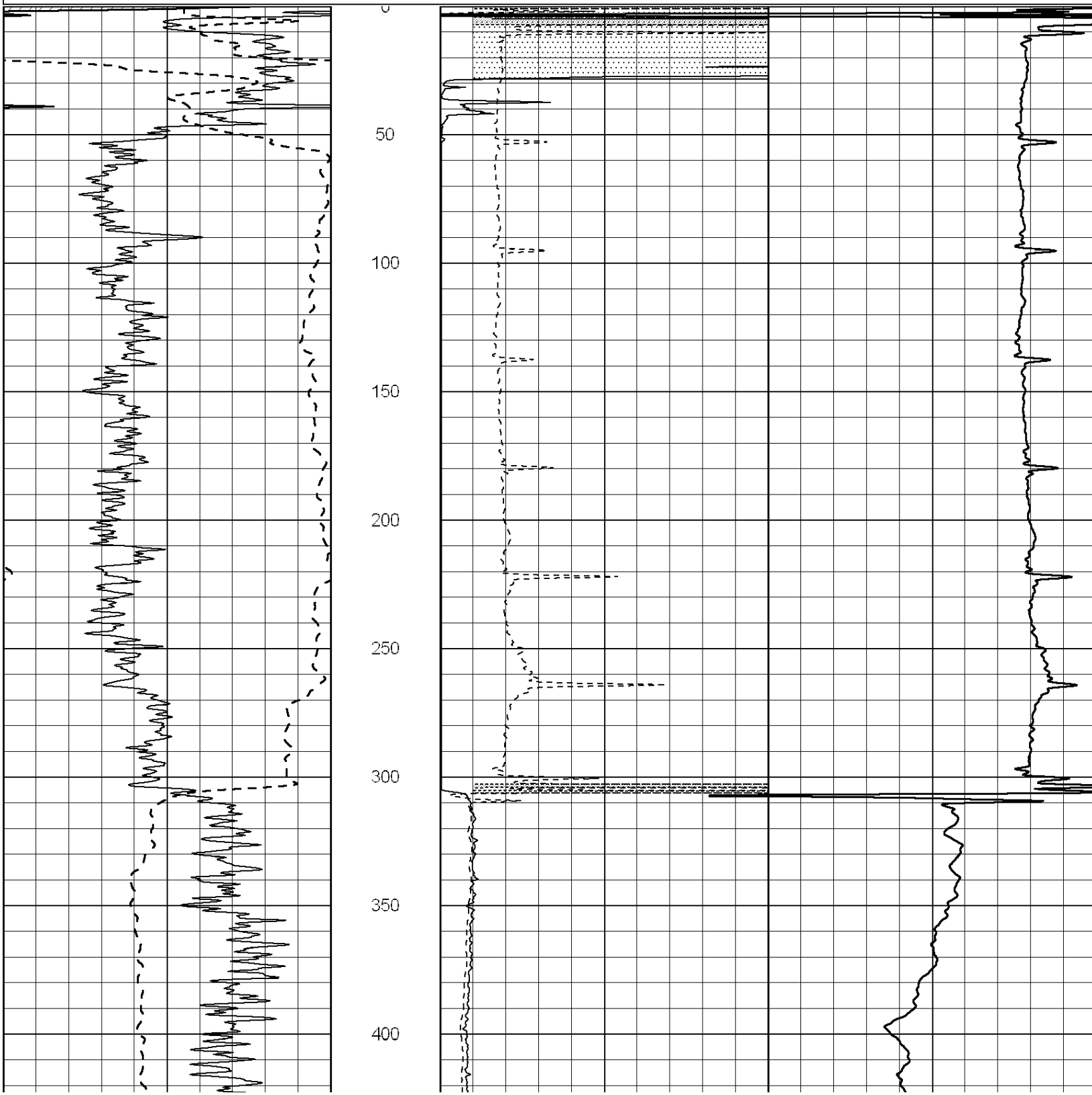
0	RLL3 (Ohm-m)	50
---	--------------	----

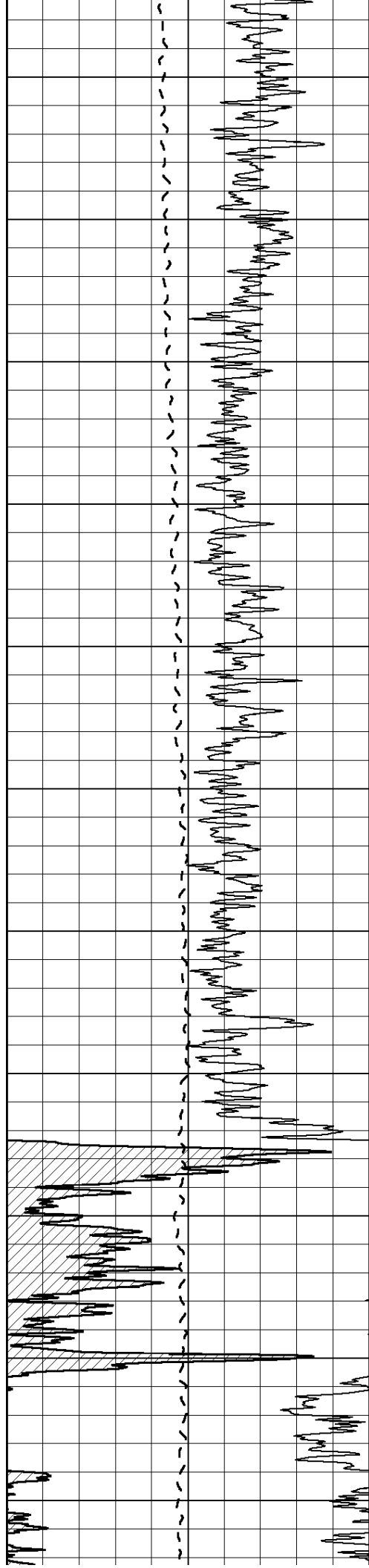
0	Deep Induction (Ohm-m)	50
---	------------------------	----

1000	CILD (mmho/m)	0
------	---------------	---

50	RILD X10 (Ohm-m)	500
----	------------------	-----

50	RLL3 X10 (Ohm-m)	500
----	------------------	-----





450

500

550

600

650

700

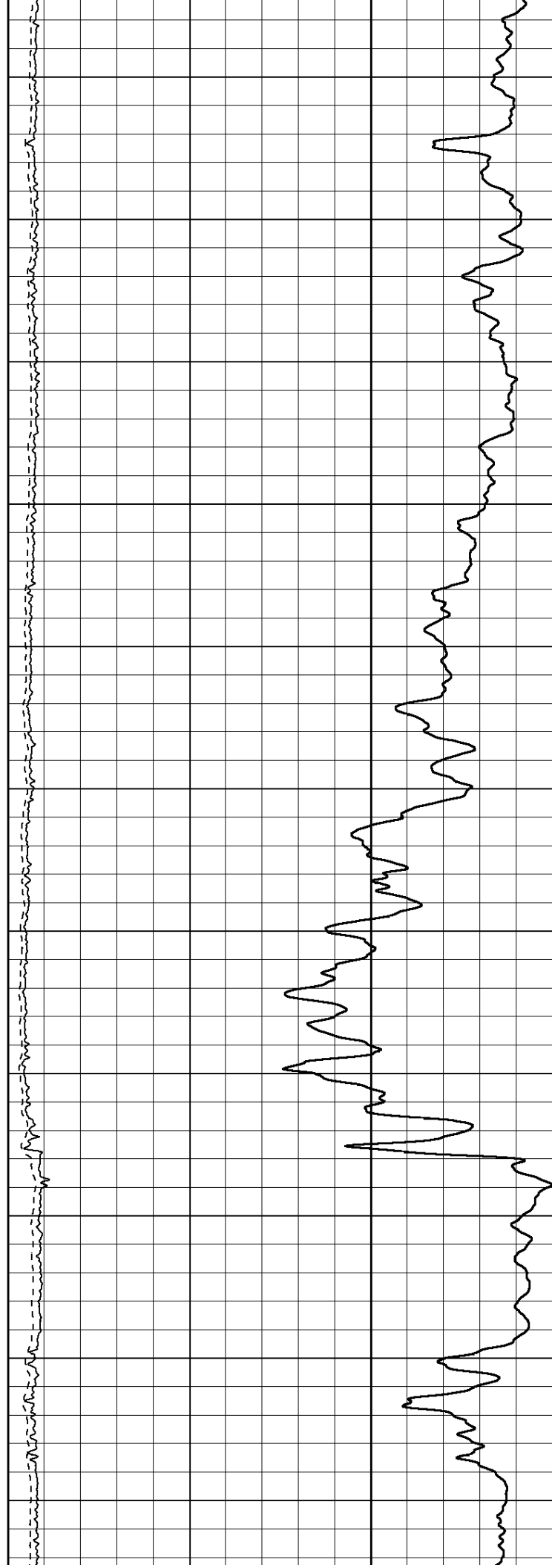
750

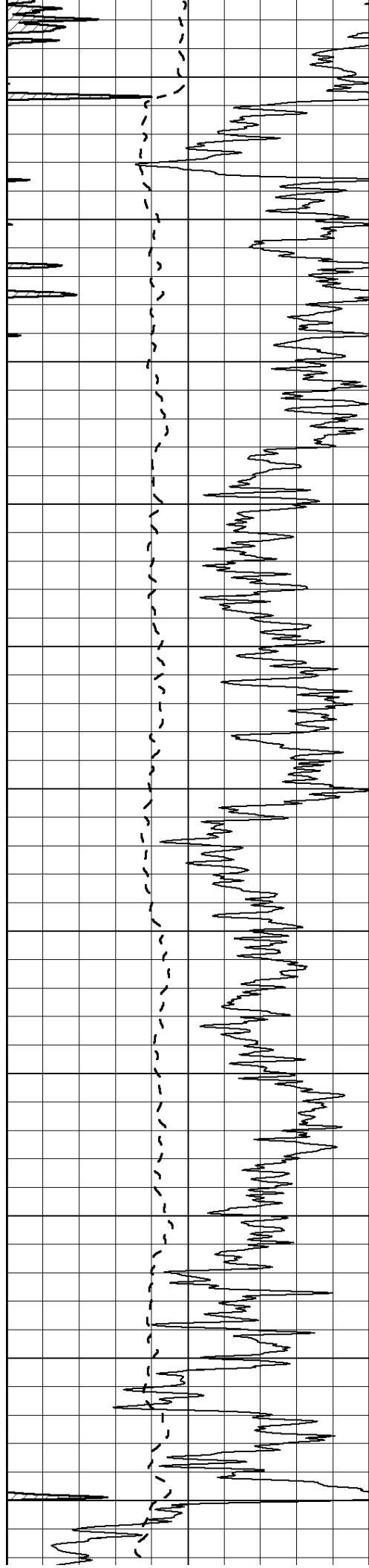
800

850

900

950





1000

1050

1100

1150

1200

1250

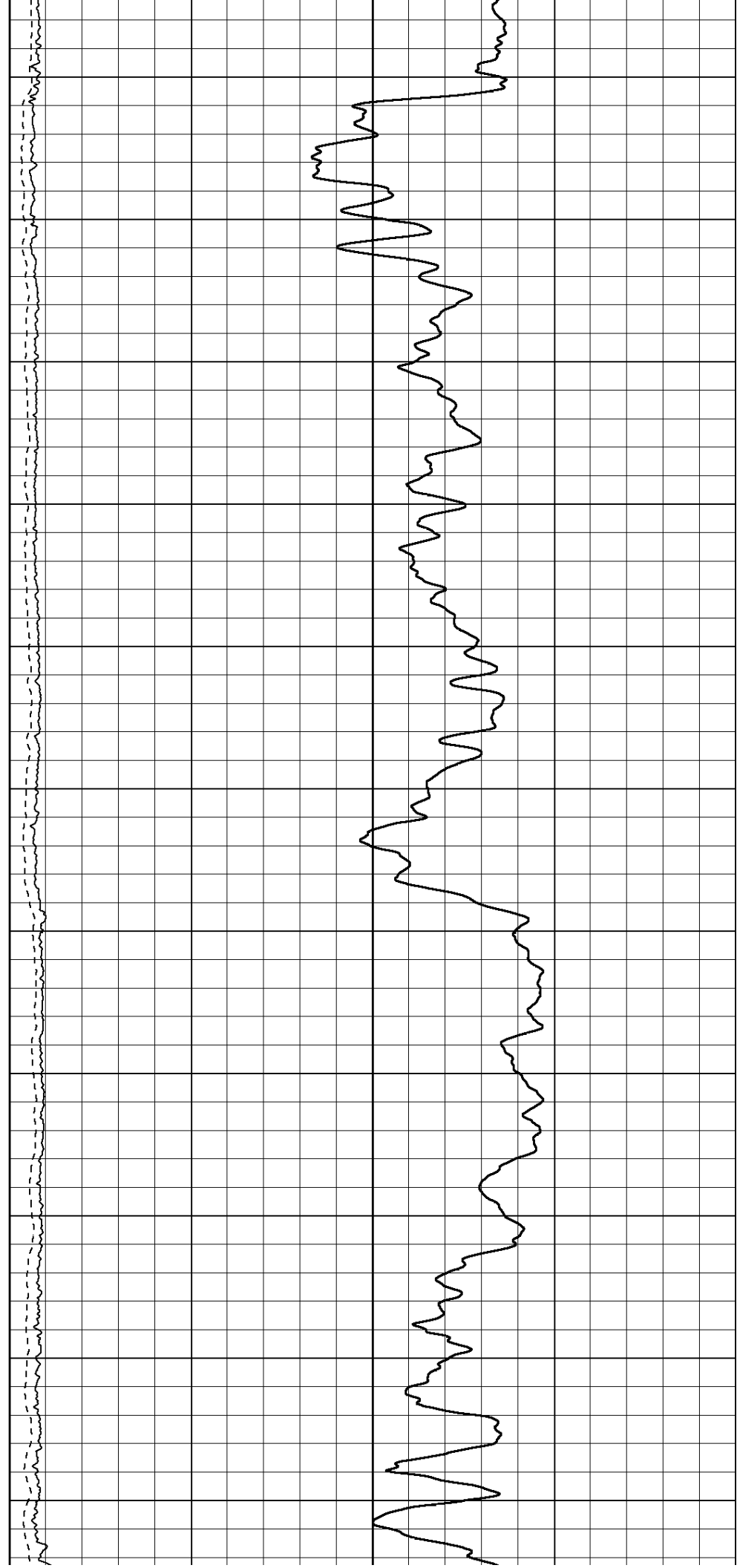
1300

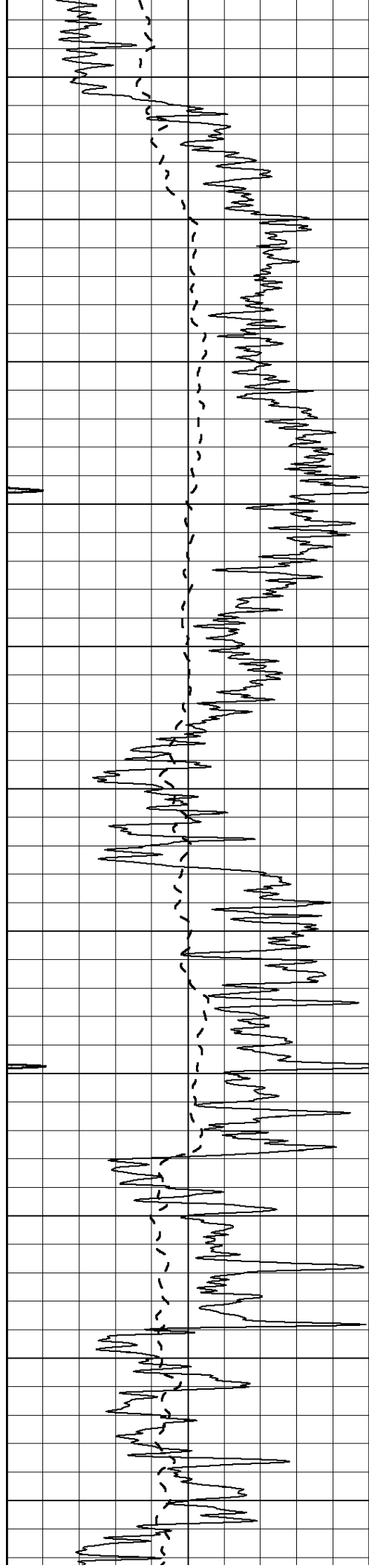
1350

1400

1450

1500





1550

1600

1650

1700

1750

1800

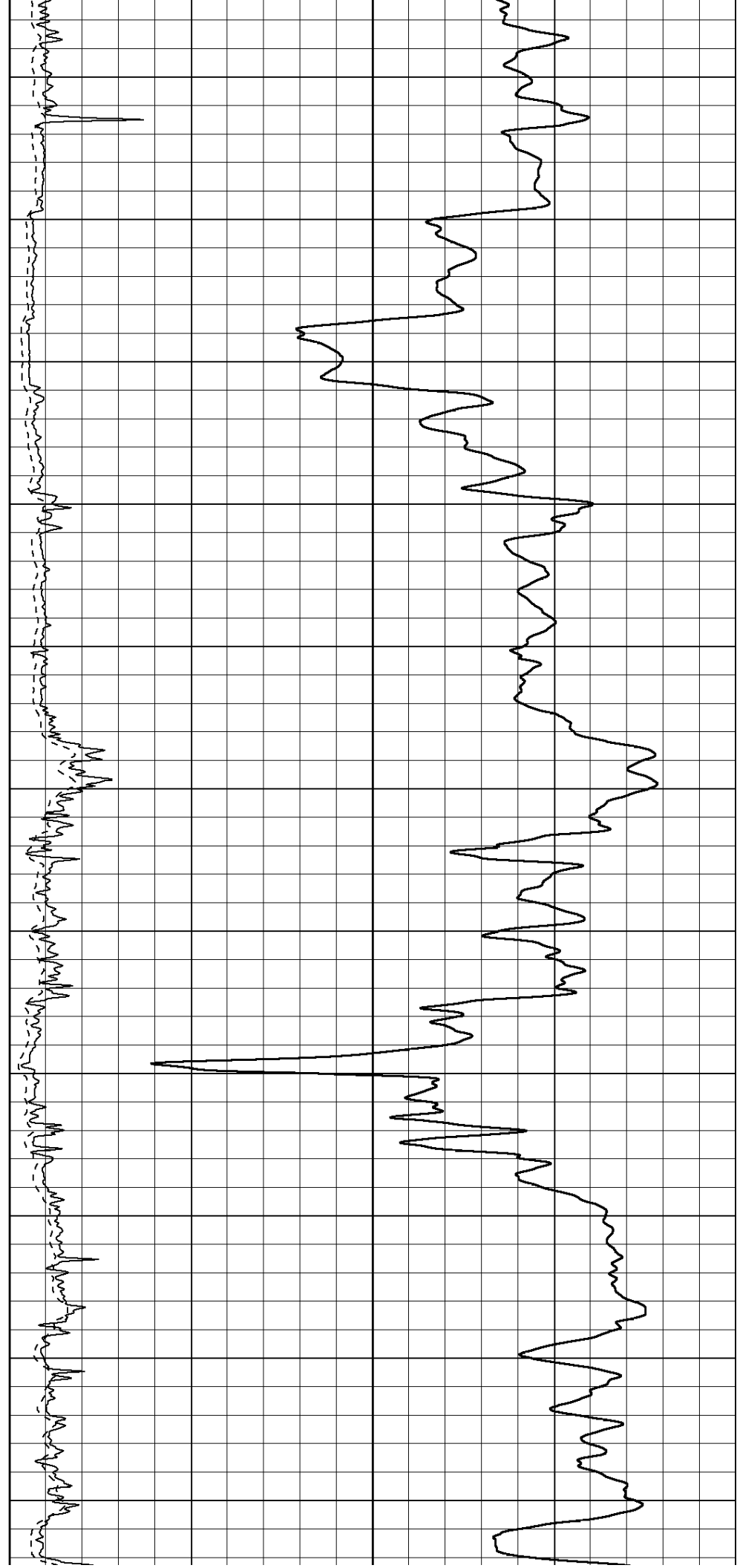
1850

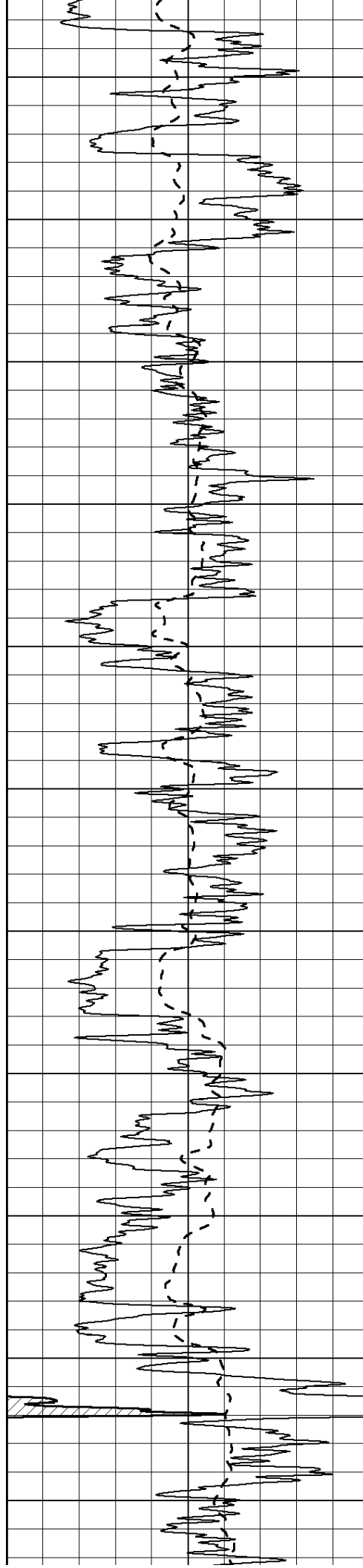
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

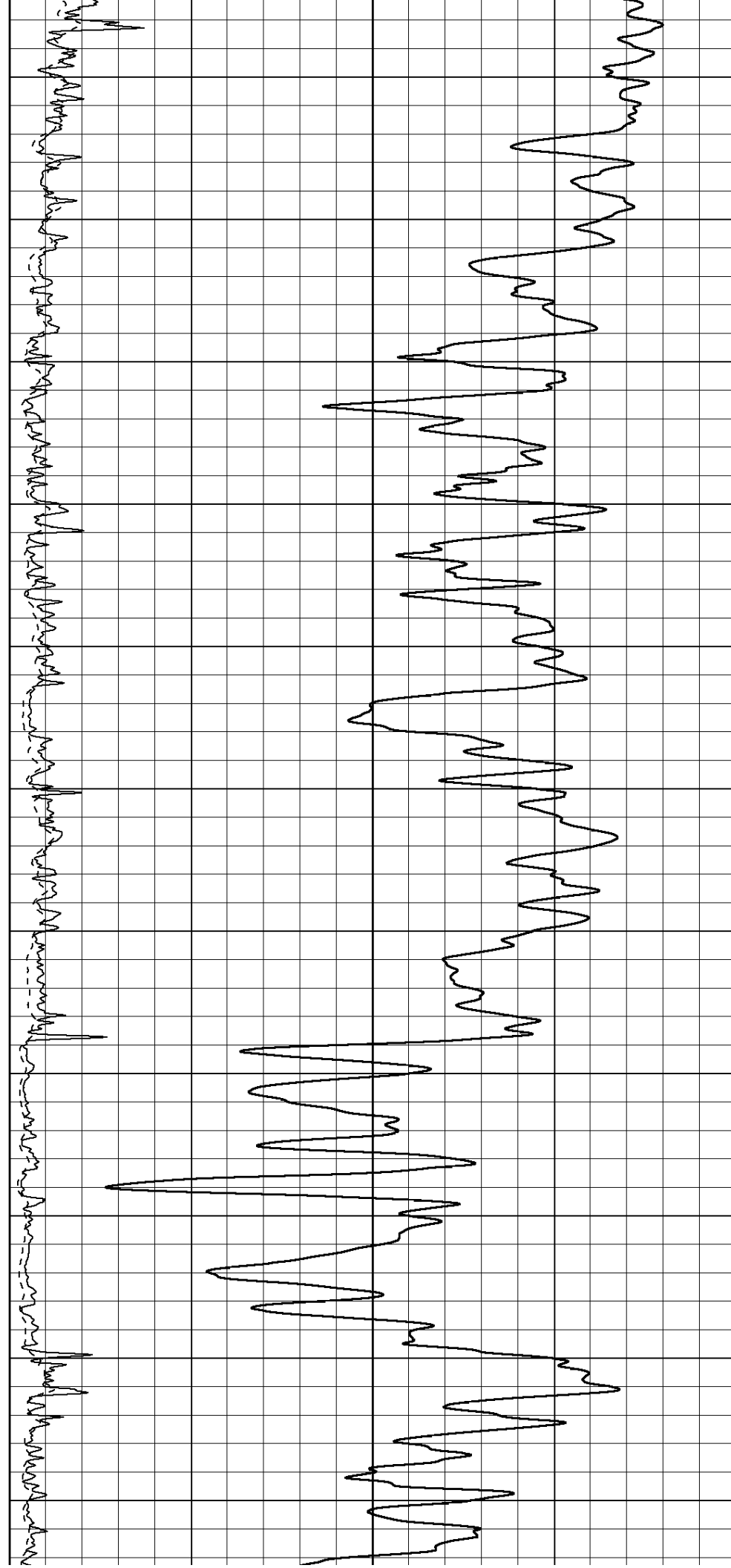
2400

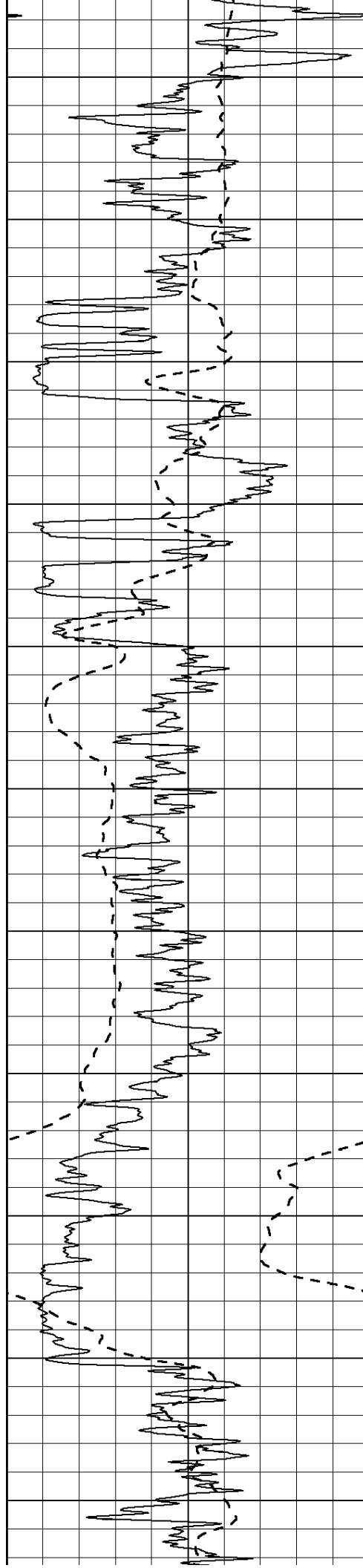
2450

2500

2550

2600





2650

2700

2750

2800

2850

2900

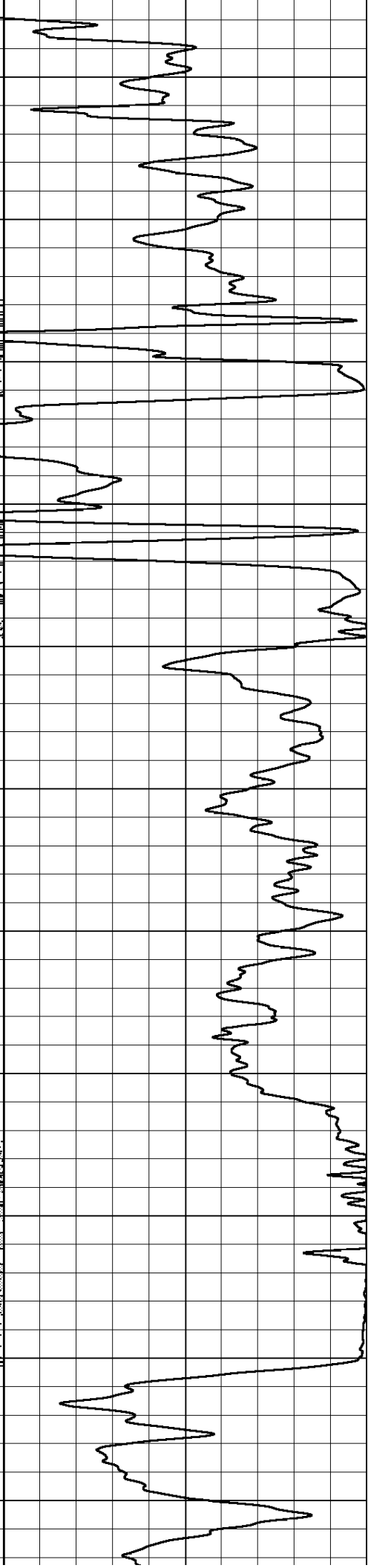
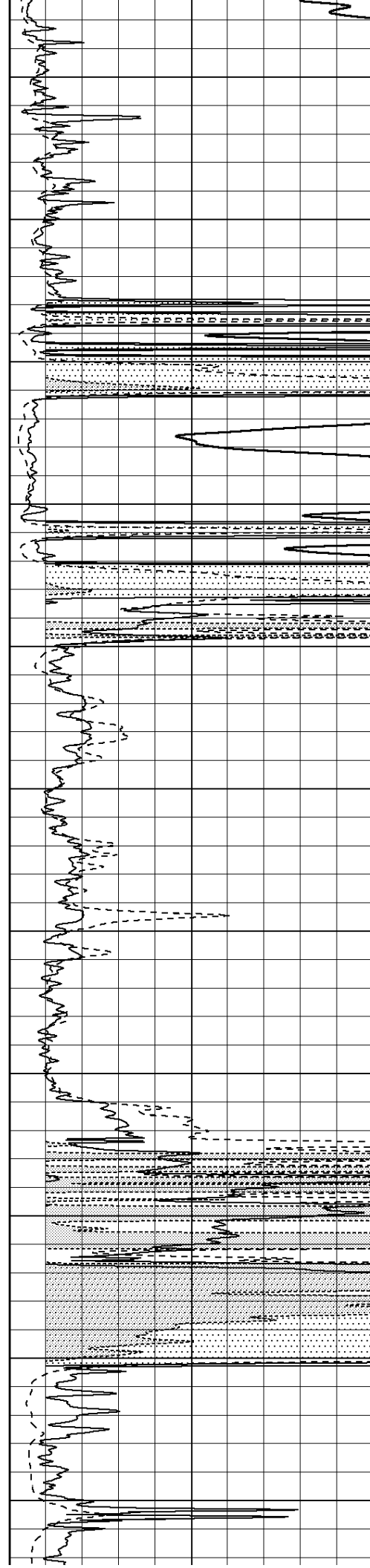
2950

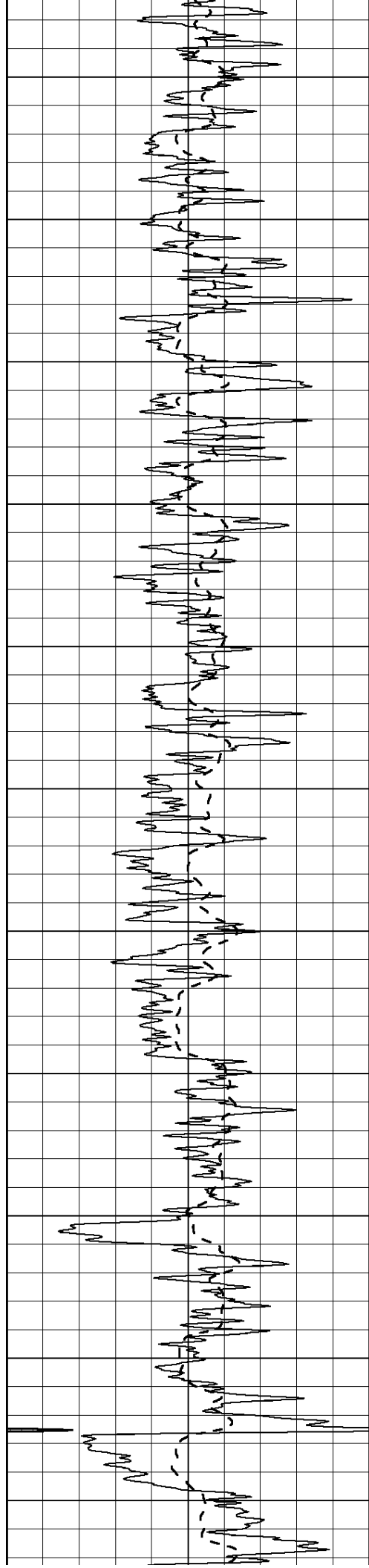
3000

3050

3100

3150





3200

3250

3300

3350

3400

3450

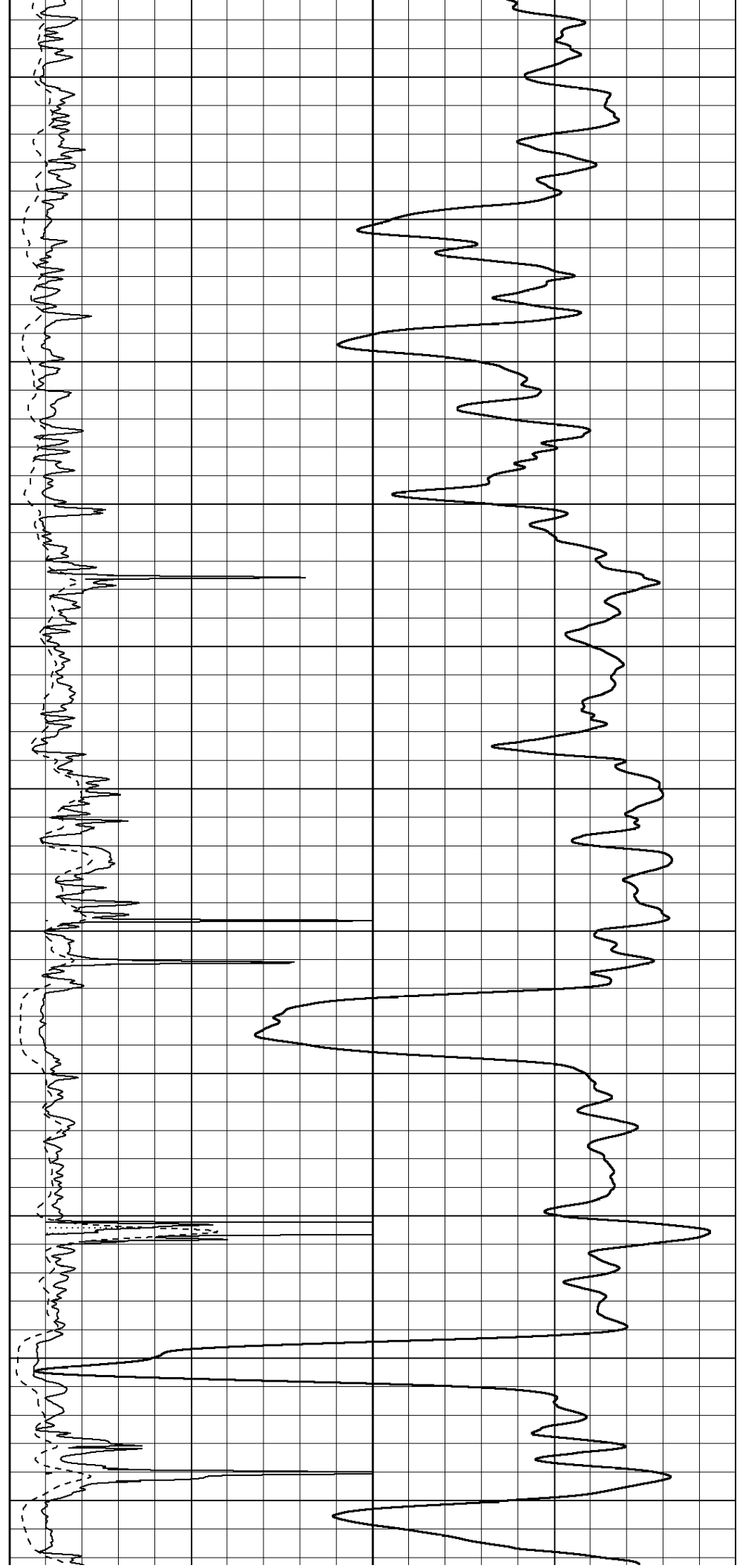
3500

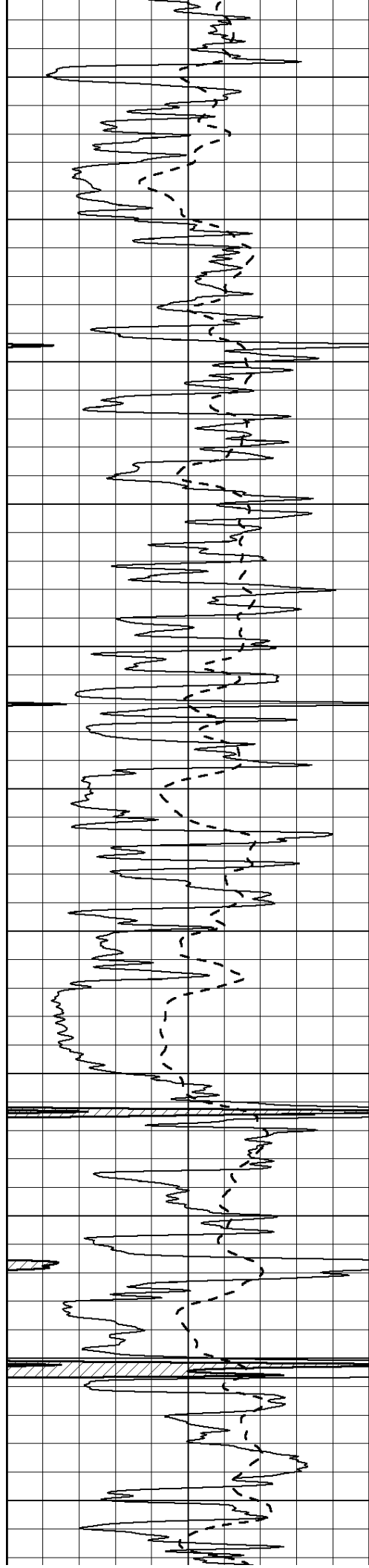
3550

3600

3650

3700





3750

3800

3850

3900

3950

4000

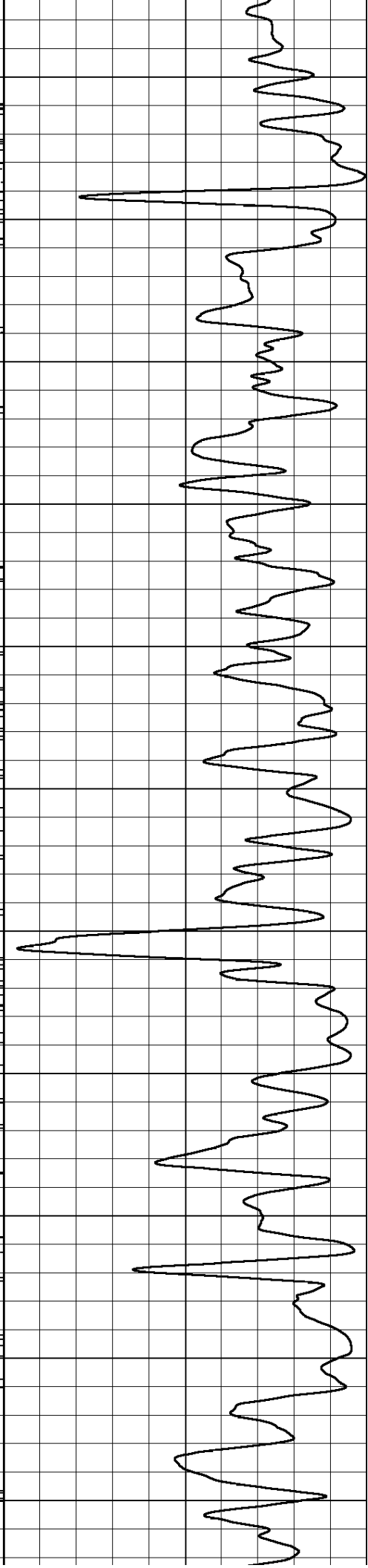
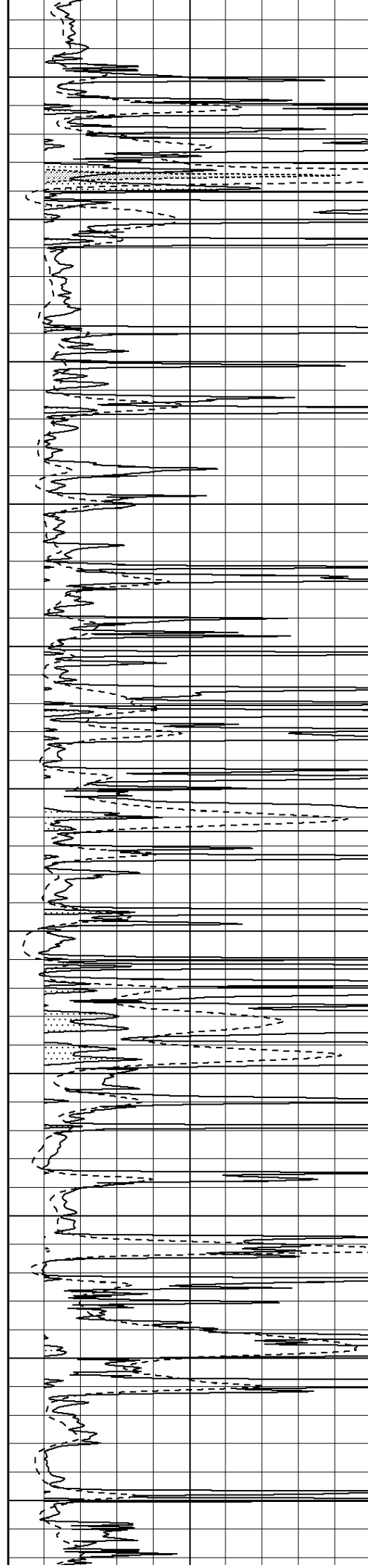
4050

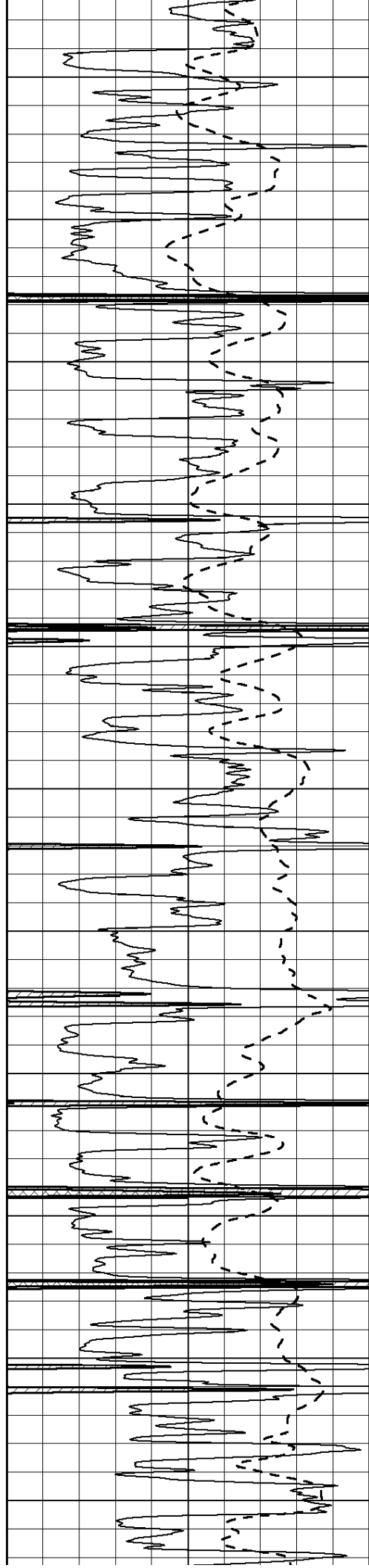
4100

4150

4200

4250





4300

4350

4400

4450

4500

4550

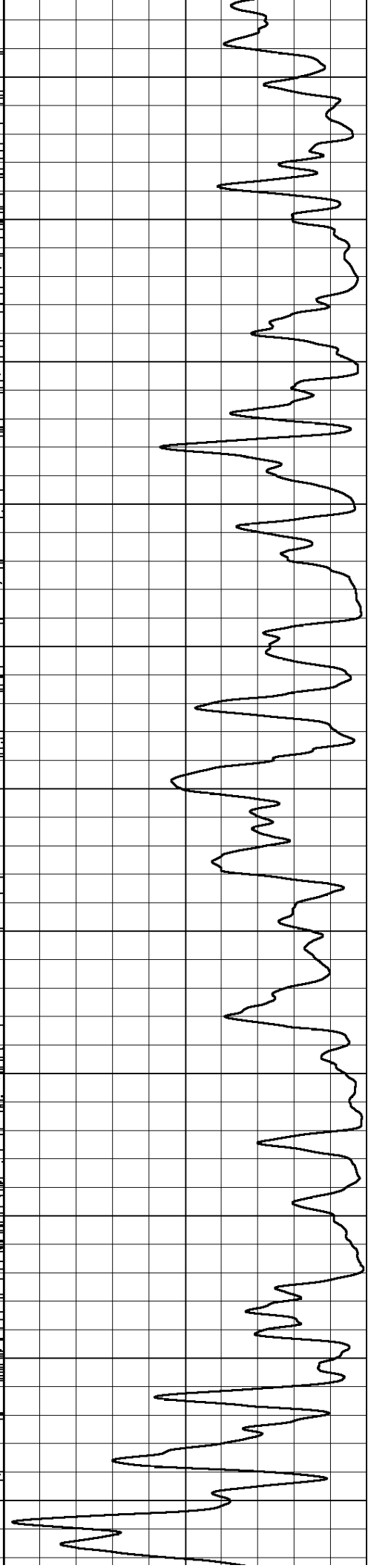
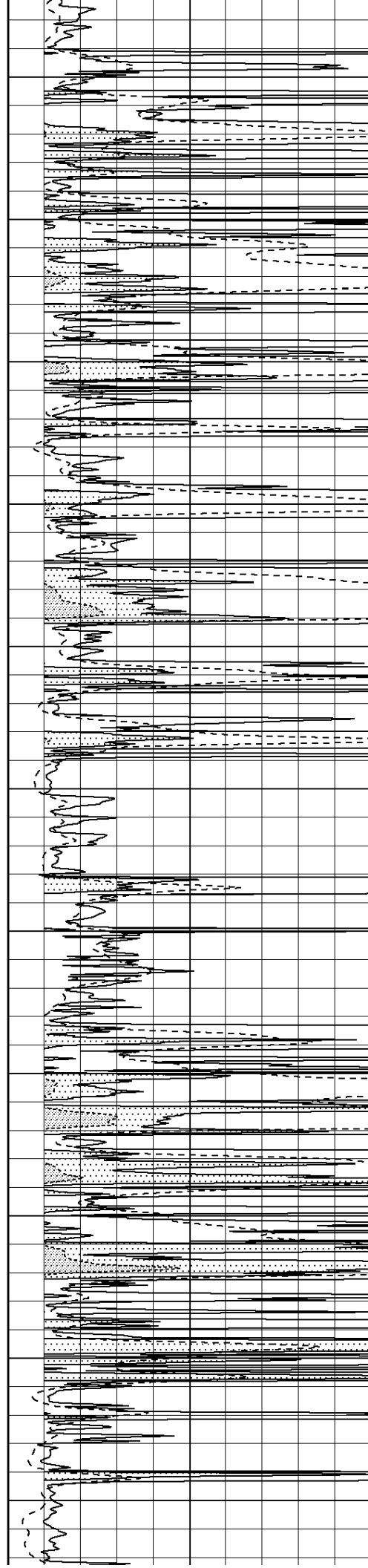
4600

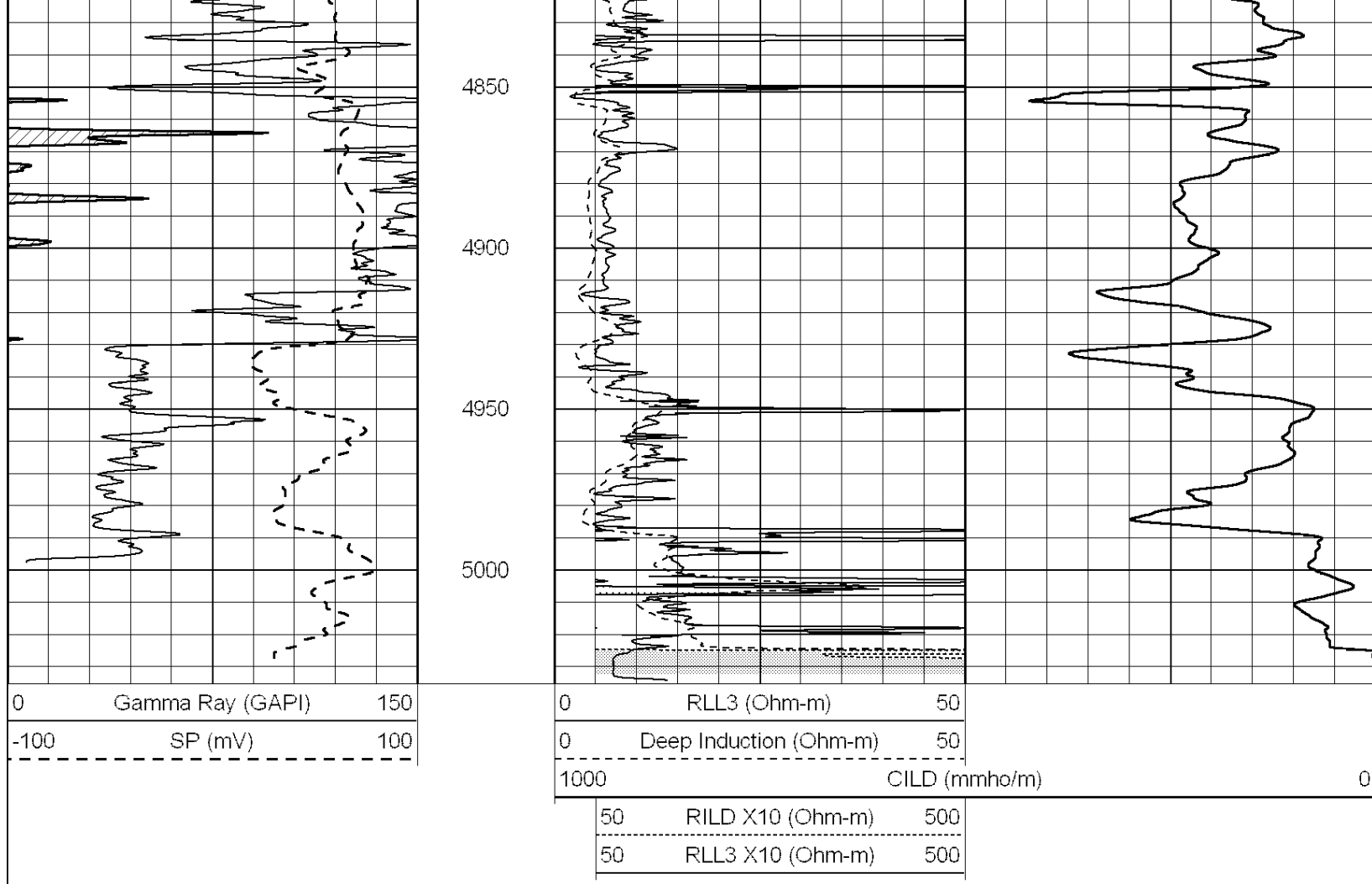
4650

4700

4750

4800

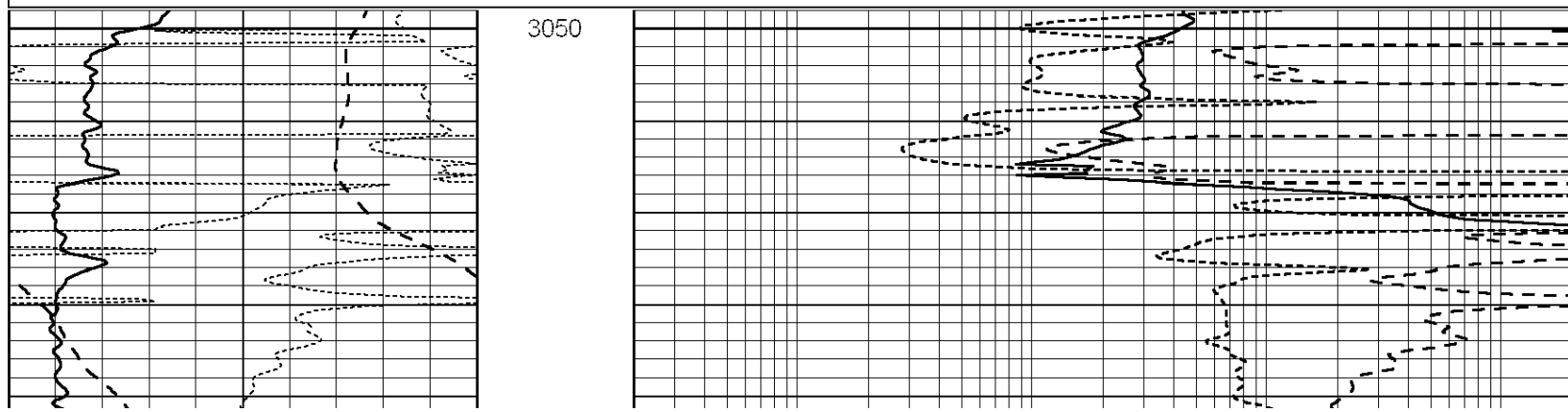


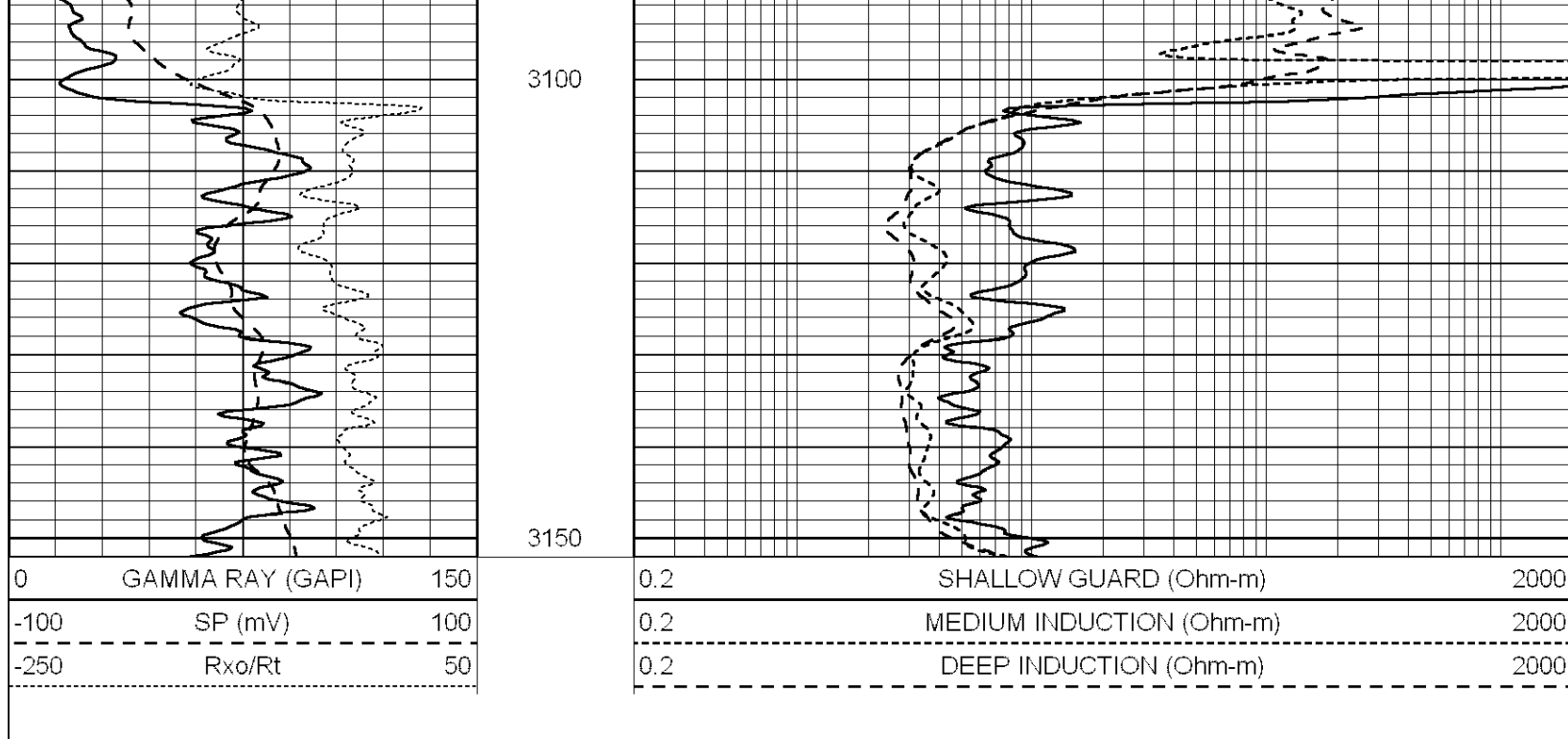


ANHYDRITE

Database File: 26225ddn.db
 Dataset Pathname: pass5.2
 Presentation Format: _dil
 Dataset Creation: Fri Sep 26 16:41:22 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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

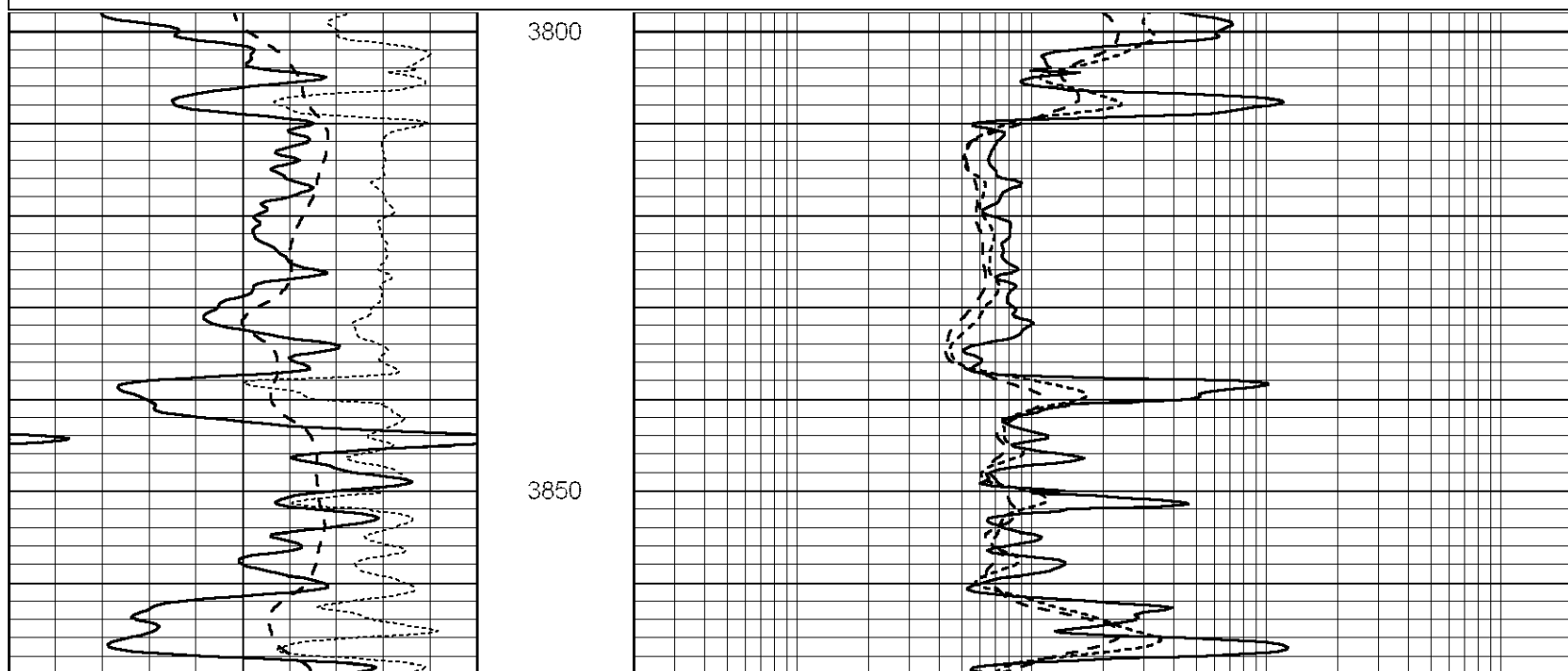
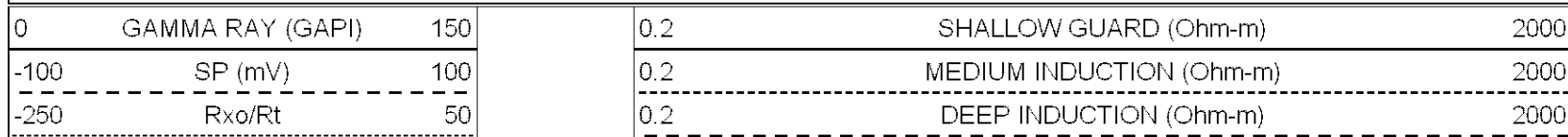


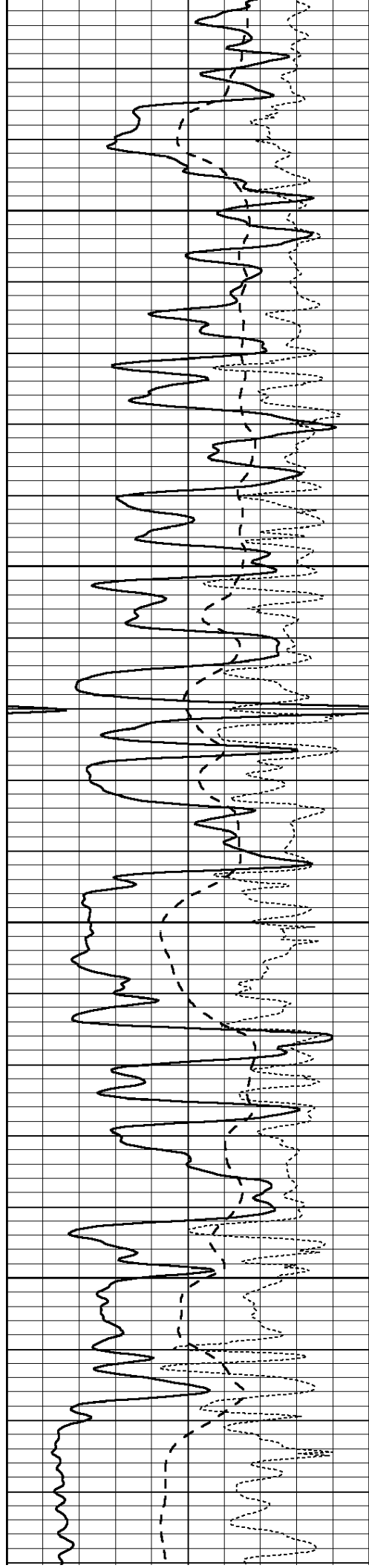


**COMPLETION
& PRODUCTION
SERVICES CO.**

MAIN SECTION

Database File: 26225ddn.db
 Dataset Pathname: pass5.1
 Presentation Format: _dil
 Dataset Creation: Fri Sep 26 16:17:51 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240



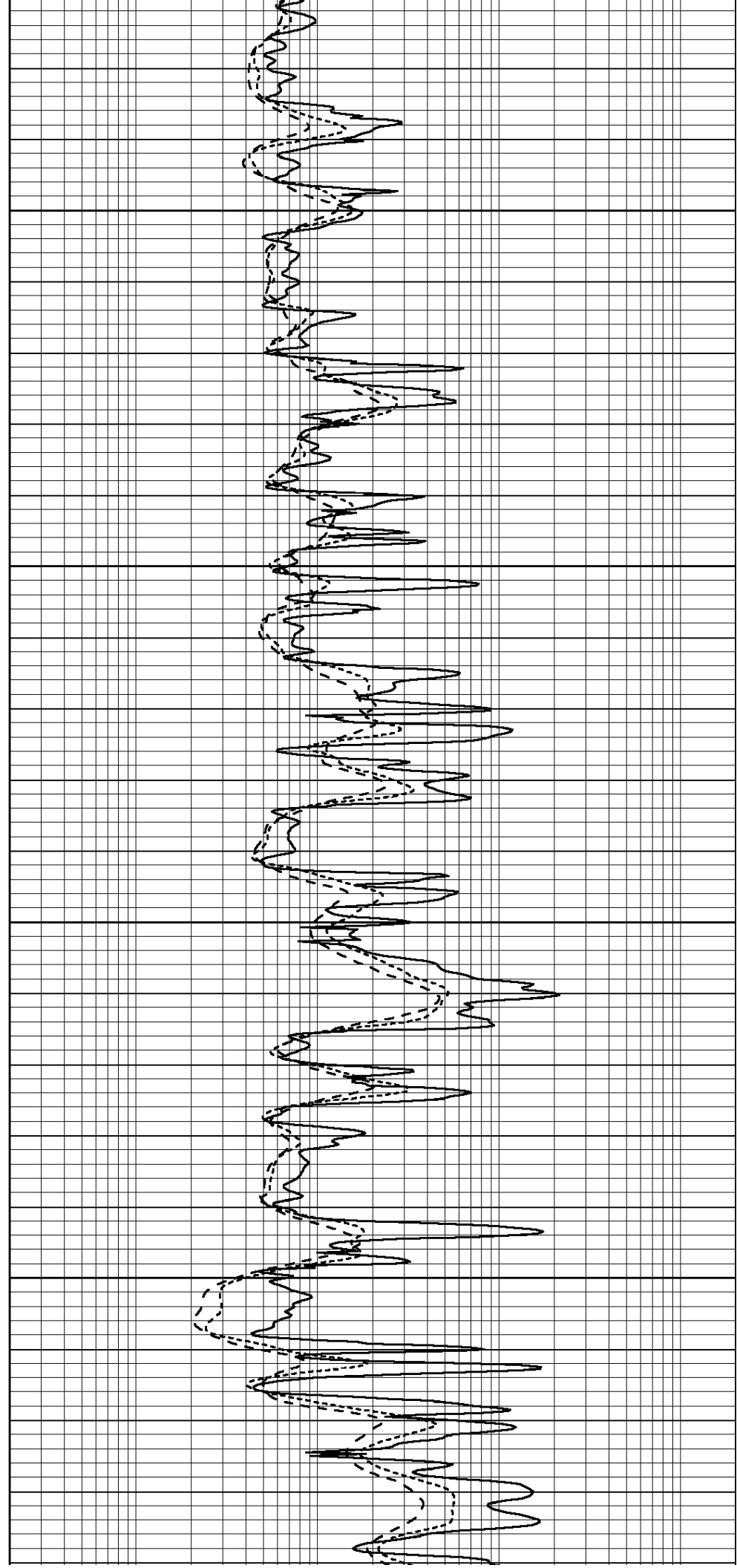


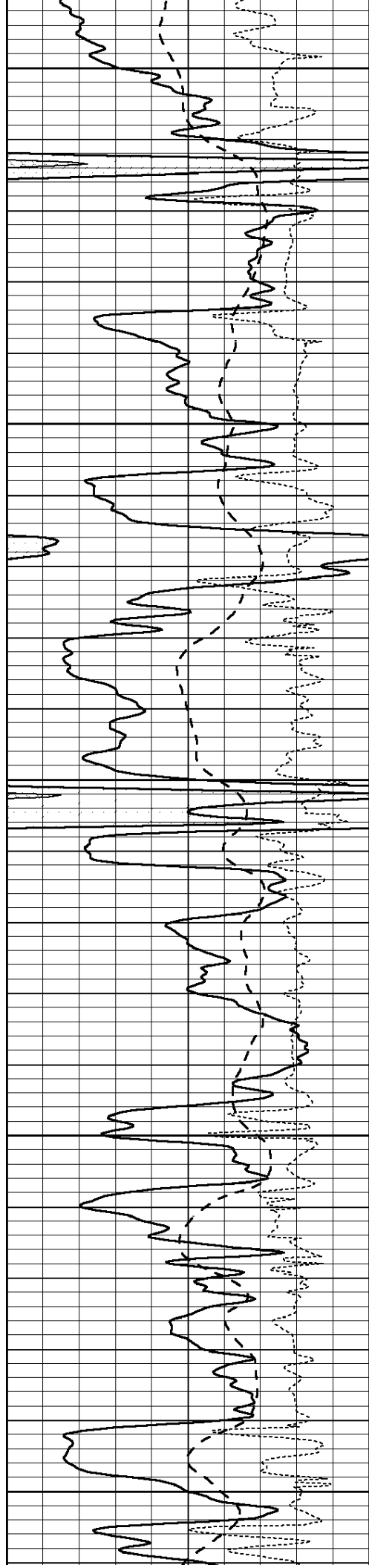
3900

3950

4000

4050





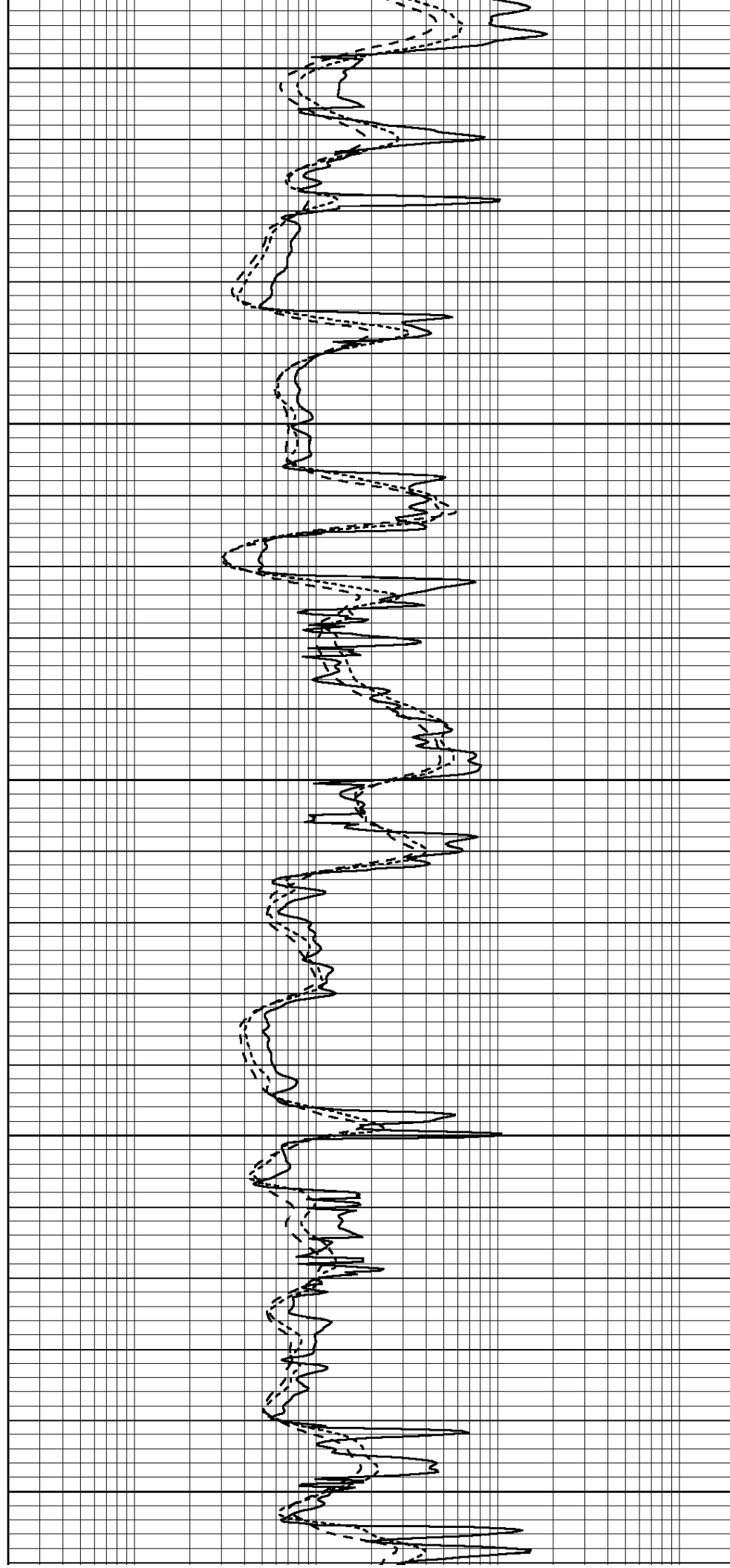
4100

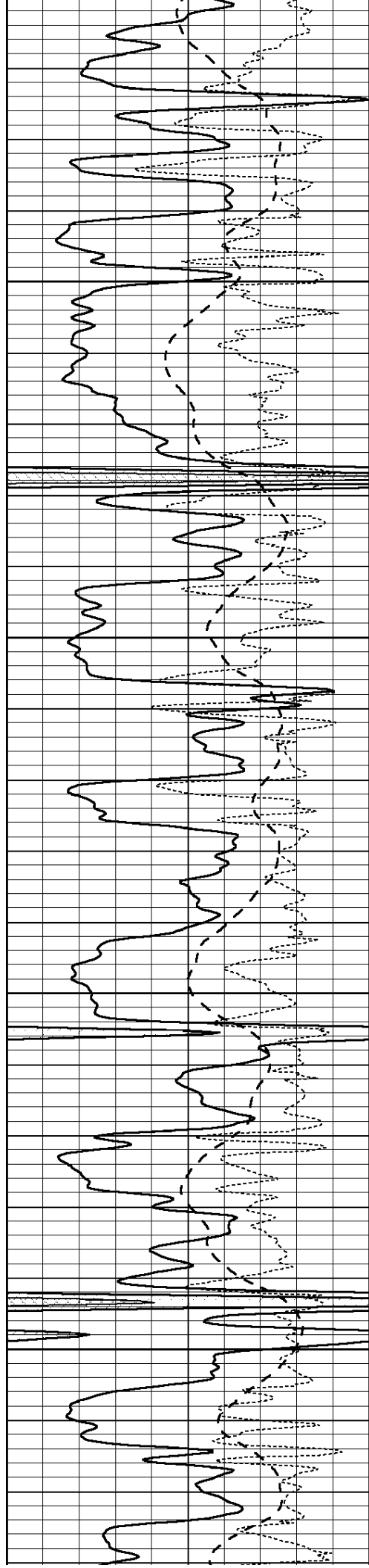
4150

4200

4250

4300



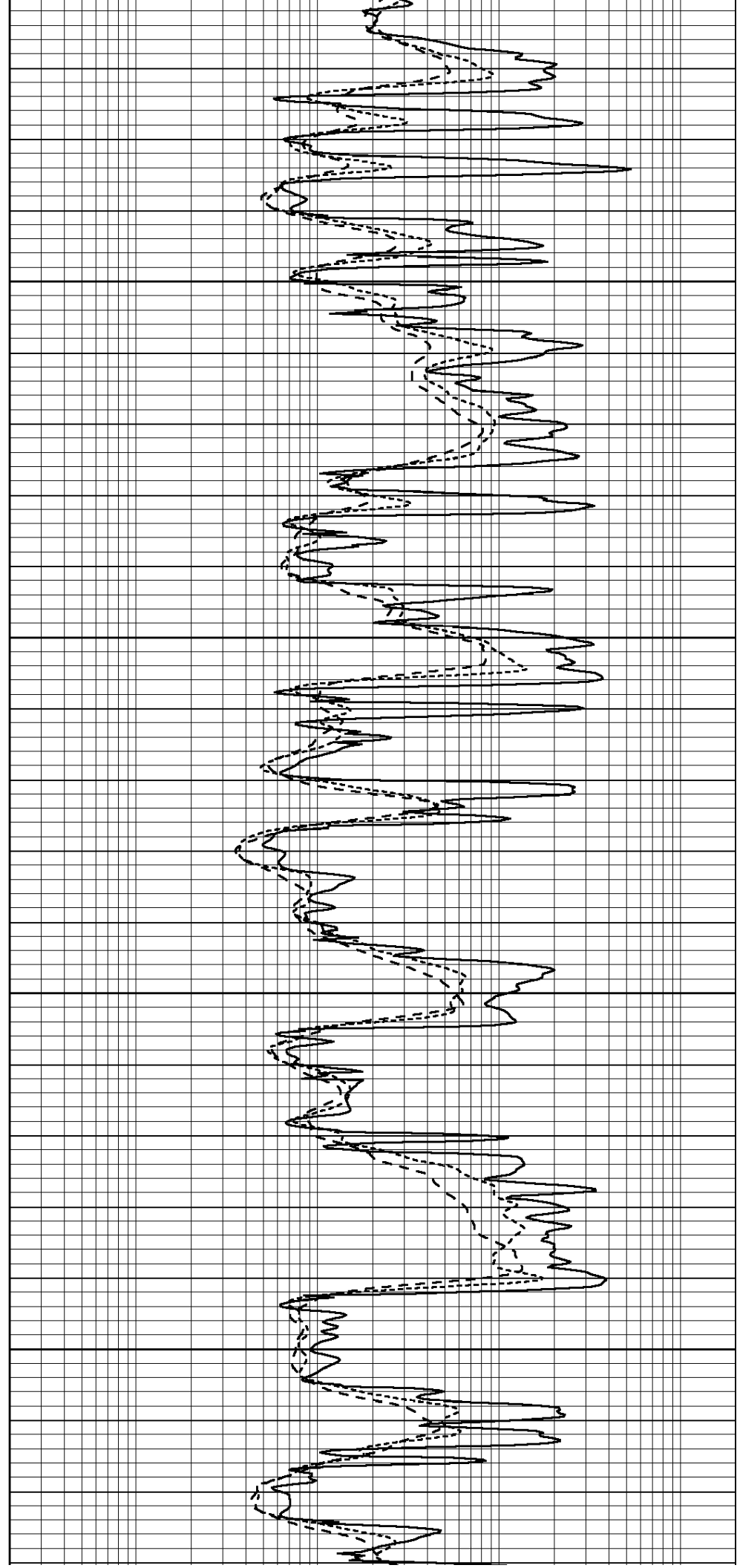


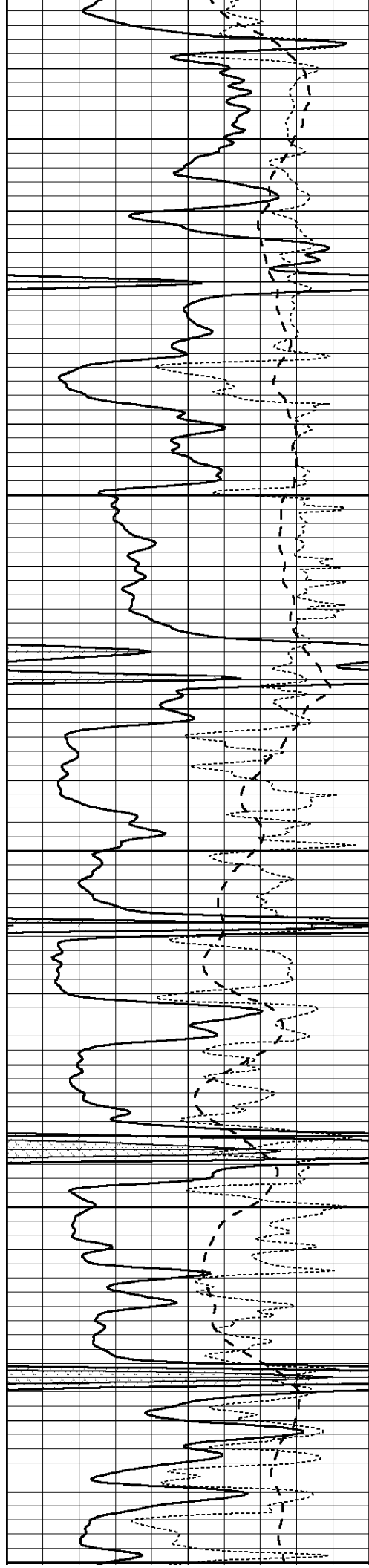
4350

4400

4450

4500





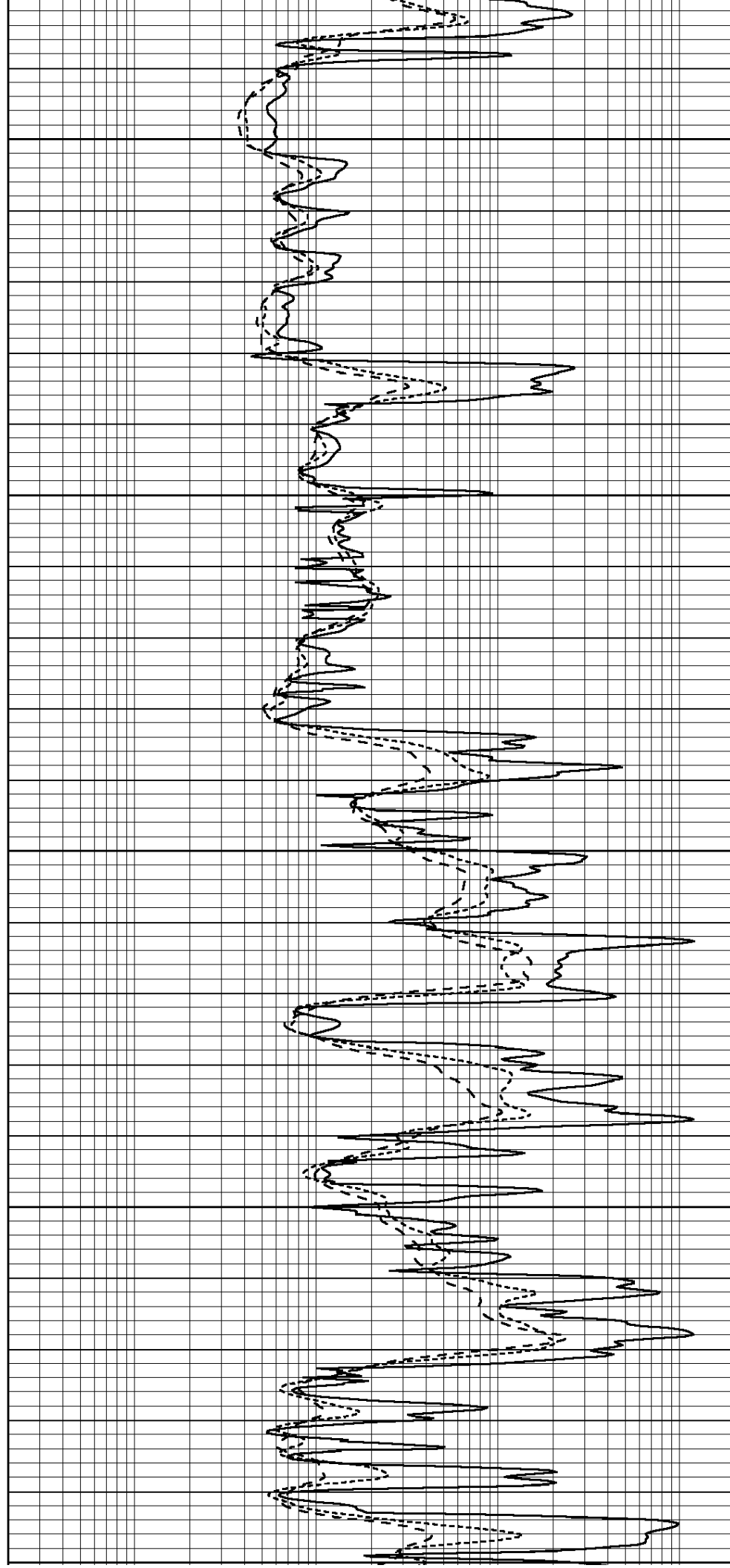
4550

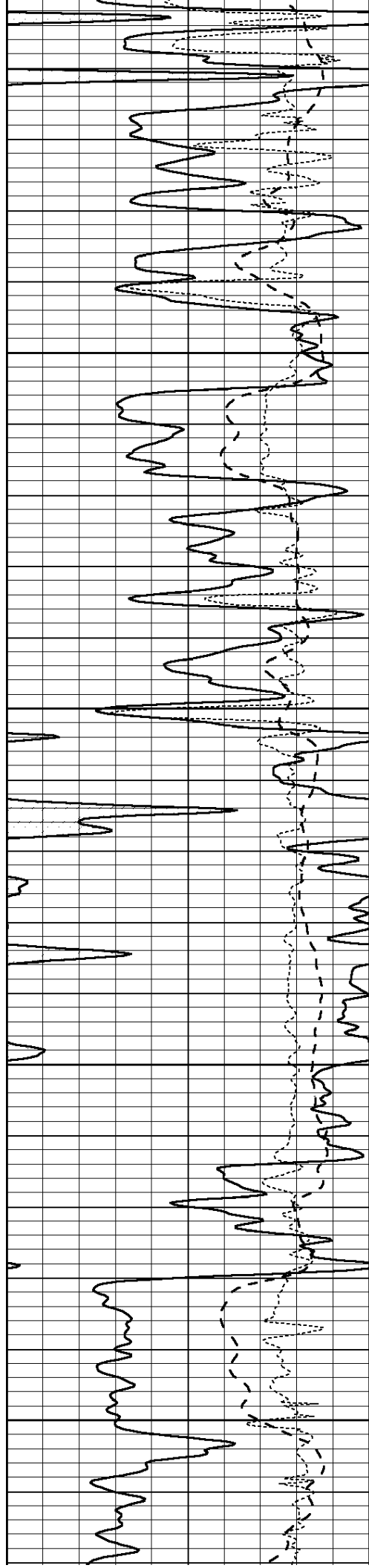
4600

4650

4700

4750





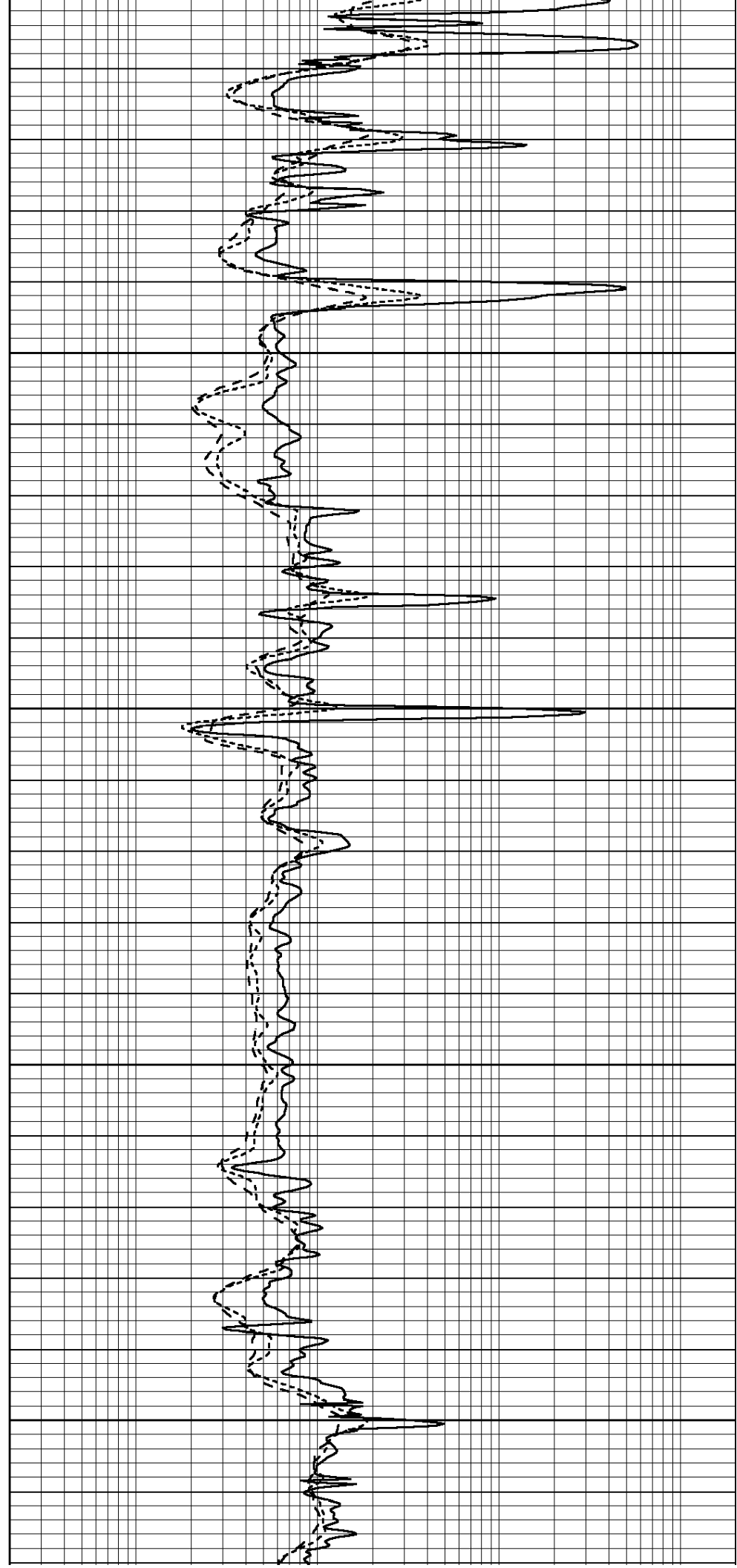
4750

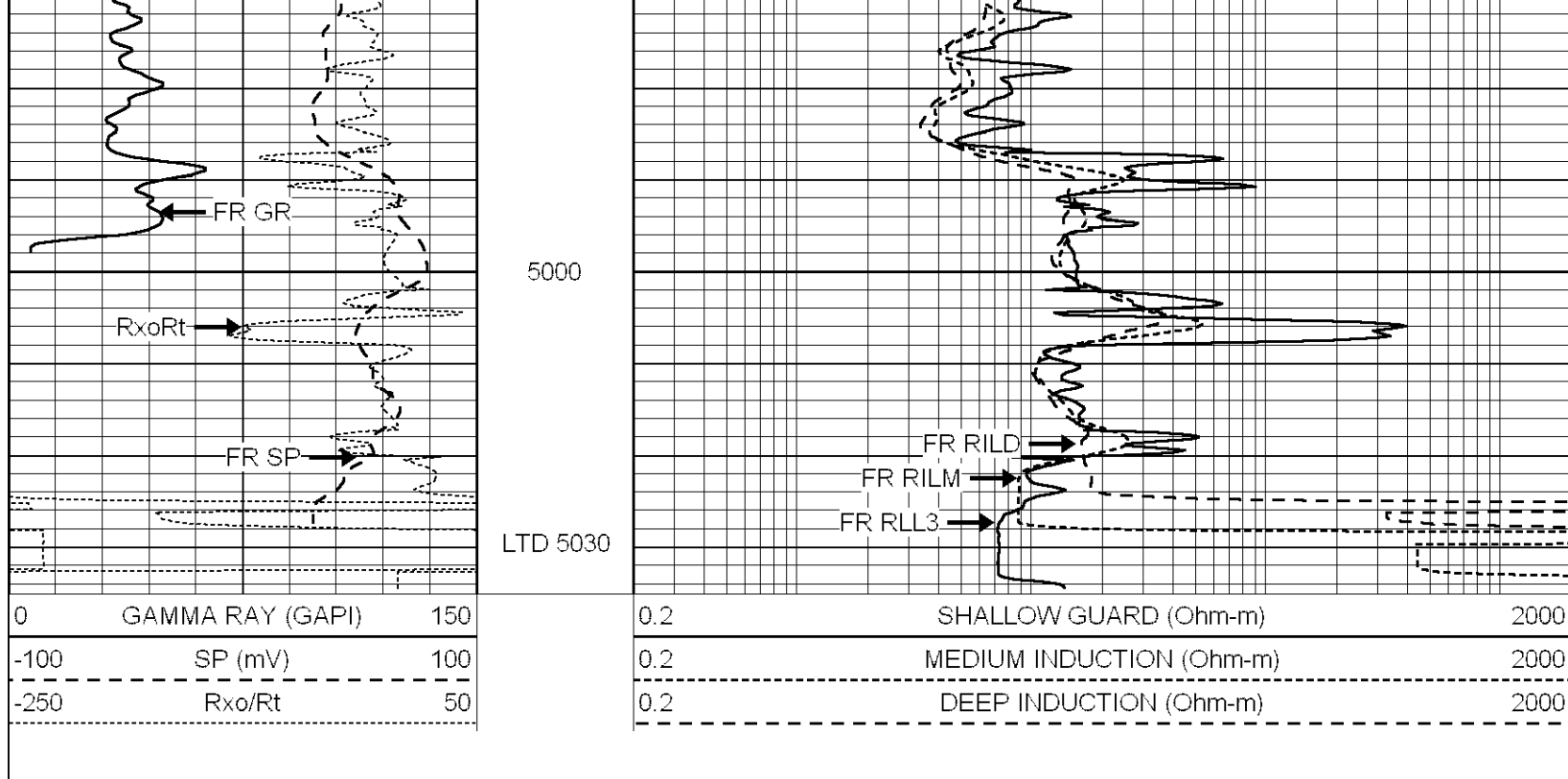
4800

4850

4900

4950



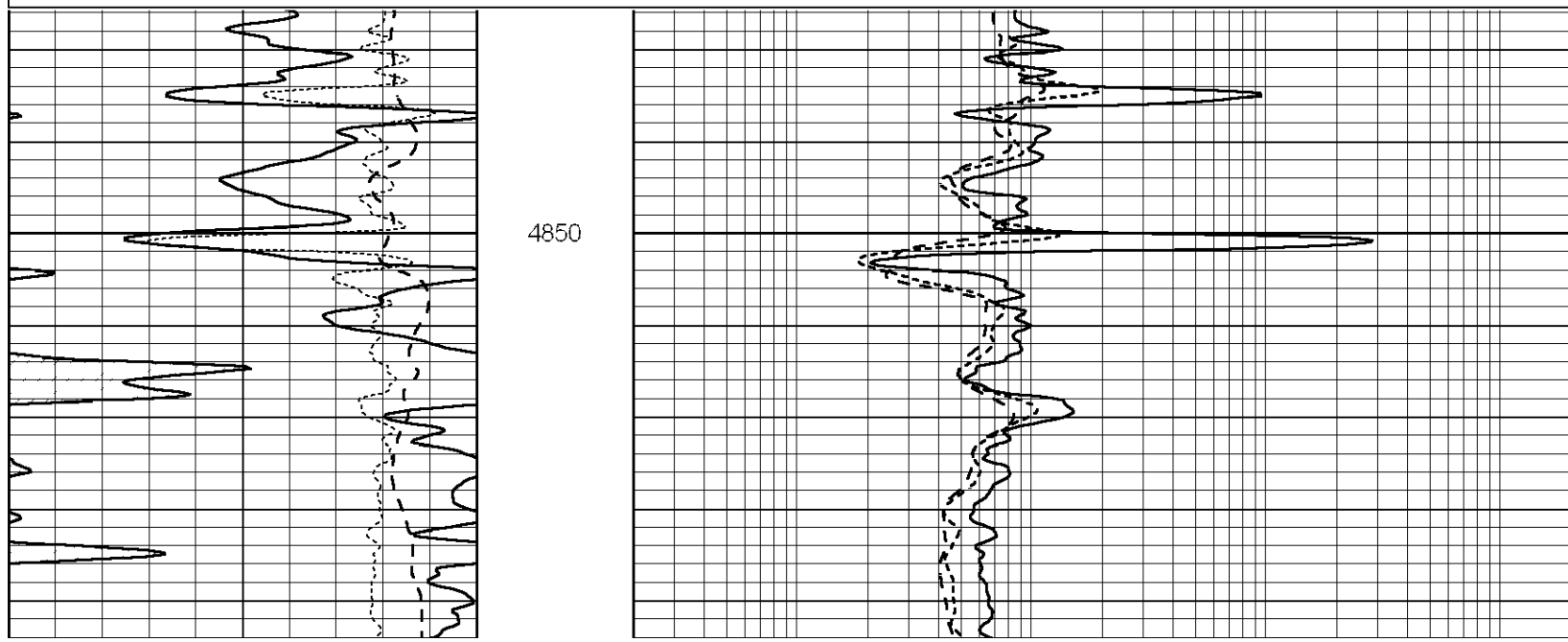


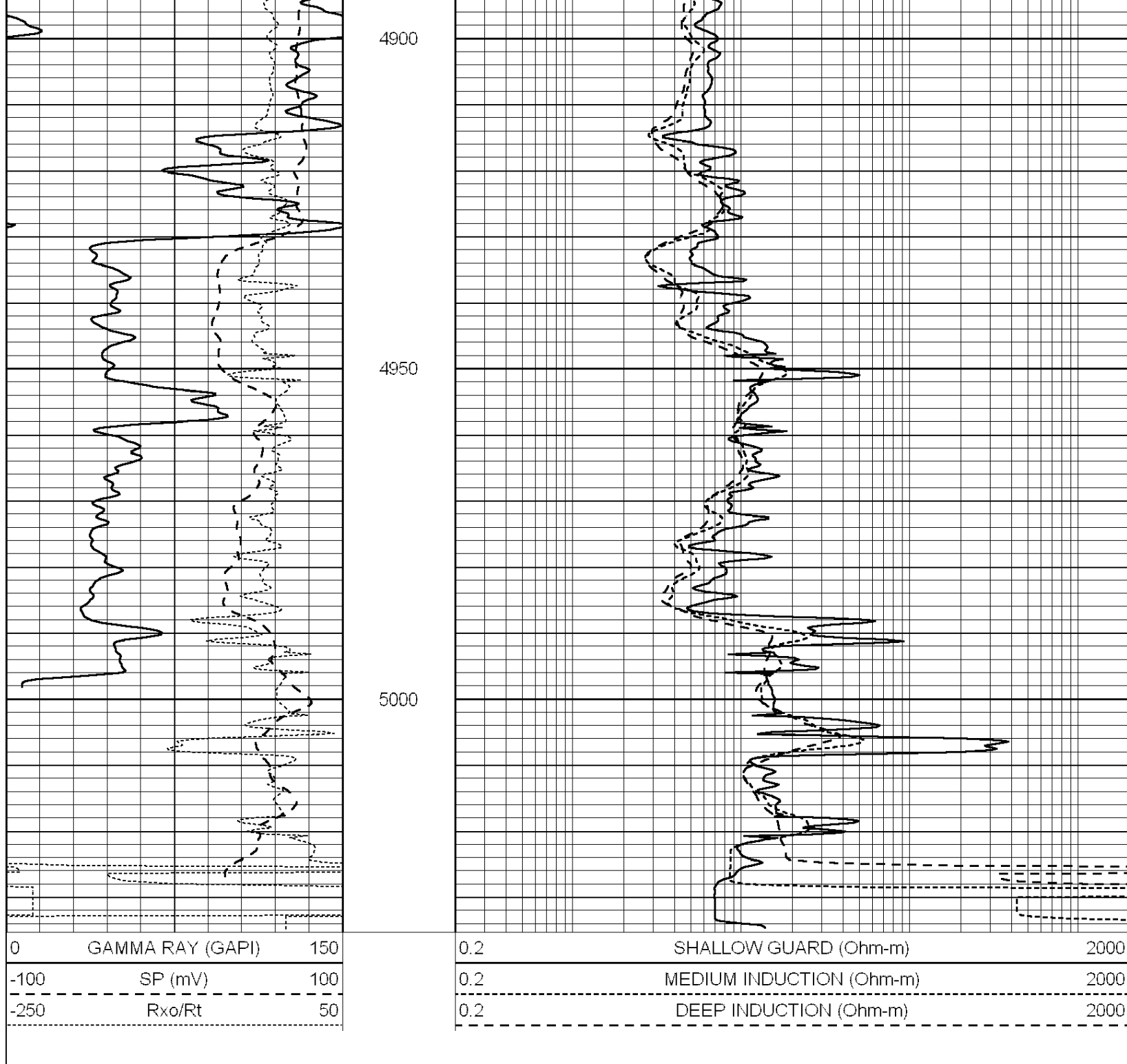
**COMPLETION
& PRODUCTION
SERVICES CO.**

REPEAT SECTION

Database File: 26225ddn.db
 Dataset Pathname: pass4.1
 Presentation Format: _dil
 Dataset Creation: Fri Sep 26 16:04:18 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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





Calibration Report

Database File: 26225ddn.db
Dataset Pathname: pass4.1
Dataset Creation: Fri Sep 26 16:04:18 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Tue Sep 02 02:19:29 2014
Downhole Cal Performed:	Tue Sep 02 01:11:23 2014
After Survey Verification Performed:	Tue Sep 02 01:28:35 2014

Surface Calibration

Readings		References		Results	
Loop:	Air	Loop	Air	m	b

Deep	0.593	0.593	V	0.000	400.000	mmho/m	620.000	-7.000
Medium	0.668	0.668	V	0.000	464.000	mmho/m	630.000	-44.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.030	0.644	V	0.000	400.000	mmho/m	651.380	-19.739
Medium	0.027	0.815	V	0.000	464.000	mmho/m	588.755	-16.048

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	3353890.000	-304691.000	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	16235500.000	-3735510.000	mmho/m	1.000	0.000
LL3		2.500	V		1400.000	Ohm-m		
		0.022	V		20.000	Ohm-m		
		-7.278	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		0.000	Ohm-m		1400.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		4000.000	mmho-m		

Compensated Density Calibration Report

Serial-Model:	GEAR5-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Tue Sep 02 02:18:22 2014

Master Calibration								
	Density			Far Detector		Near Detector		
Magnesium	1.710	g/cc		943.83		576.01	cps	
Aluminum	2.600	g/cc		212.01		399.19	cps	
	Spine Angle = 76.20			Density/Spine Ratio = 0.579				
	Size			Reading				
Small Ring	8.00	in		1.77	V			
Large Ring	14.00	in		2.90	V			

Compensated Neutron Calibration Report

Serial Number:	080620
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:	46001	
Tool Model:	Probe1	
Performed:	Tue Sep 02 02:32:49 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2600	GAPI/cps