



RADIAL
CEMENT BOND
GAMMA RAY
CCL LOG

Pioneer Energy Services

Company ANADARKO PETROLEUM
Well SUMMIT 29N-29HZ
Field WATTENBERG
County WELD
State COLORADO

Company ANADARKO PETROLEUM
Well SUMMIT 29N-29HZ
Field WATTENBERG
County WELD State COLORADO

Location: API #: 05-123-40175
SEC 34 TWP 2N RGE 67W
Permanent Datum Ground Level Elevation 4944'
Log Measured From K.B. 16' A.G.L.
Drilling Measured From K.B.
Other Services
Elevation
K.B. 4960'
D.F.
G.L. 4944'

Date	29-DEC-2014
Run Number	ONE
Depth Driller	12081'
Depth Logger	6510'
Bottom Logged Interval	6510'
Top Log Interval	SURFACE
Open Hole Size	N/A
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	SEE LOG
Time Well Ready	10:00
Time Logger on Bottom	11:00
Equipment Number	P-109
Location	FORT MORGAN
Recorded By	B.HARPER
Witnessed By	

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record							
Surface String		Size	Wgt/Ft	Top	Bottom		
		9-5/8"	36#	SURFACE			
Prot. String							
Production String		7"	26#	SURFACE	7491'		
Liner		4.5"	11.6#	6457'	12081'		

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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

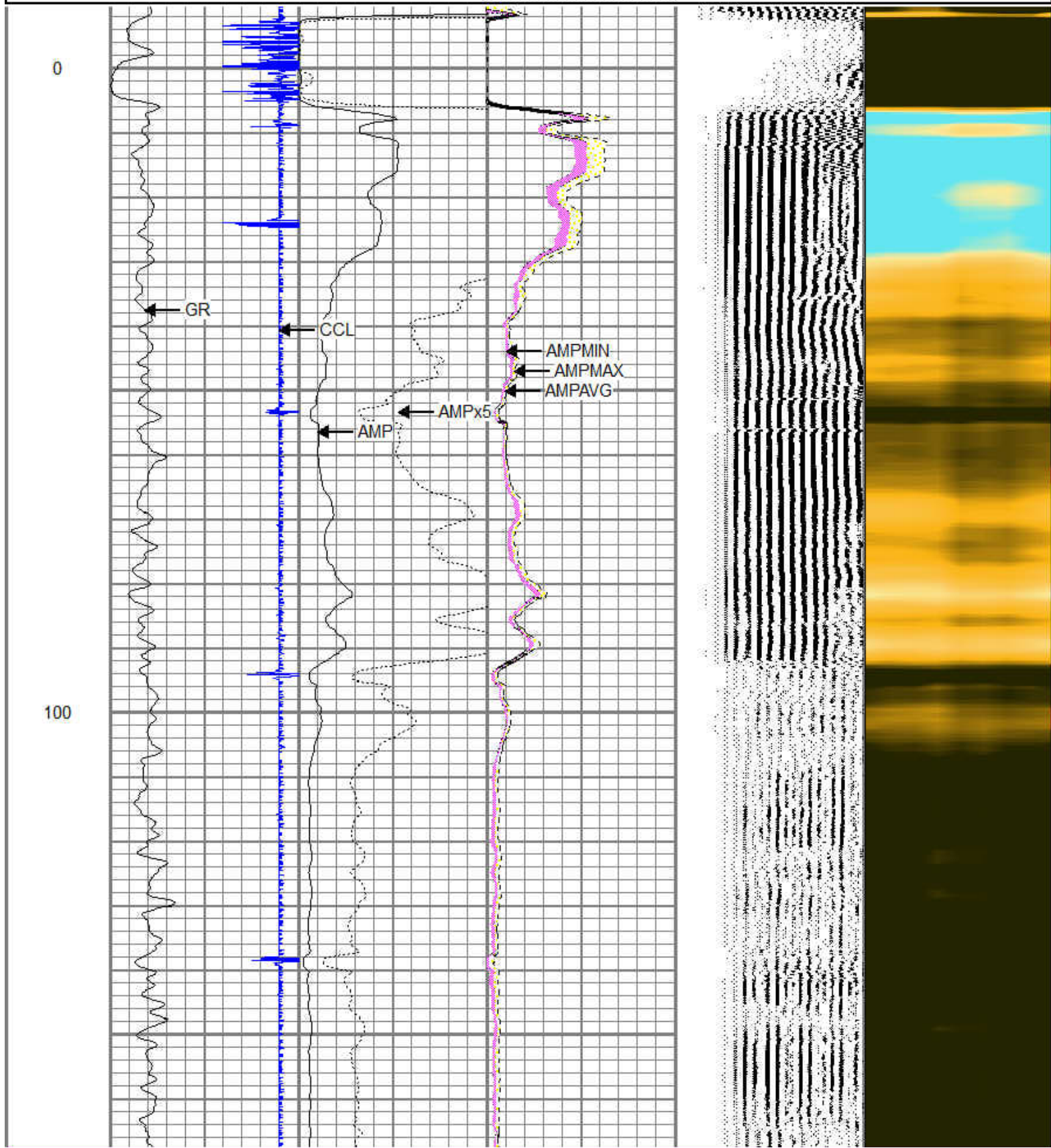
LOG CORRELATED TO LINER TOP

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head	1.00	1.69	10.00


MAIN PASS 2800 PSI

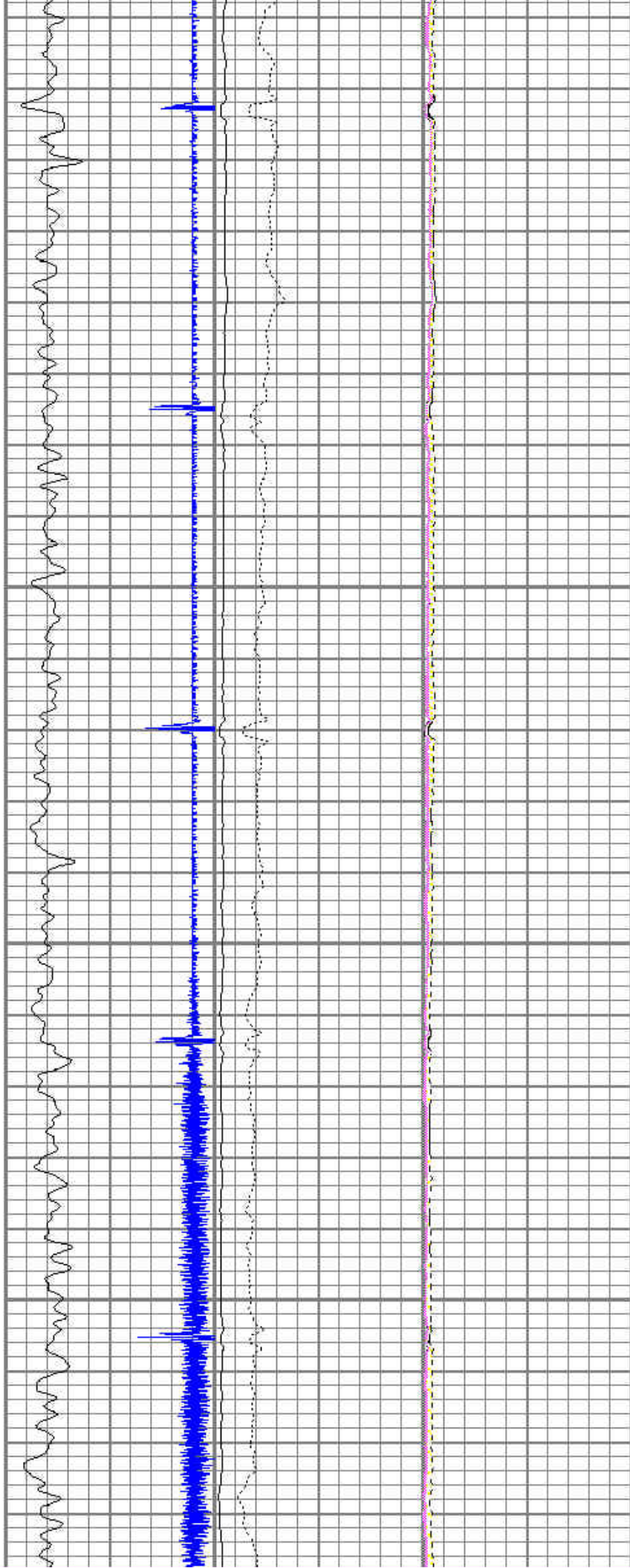
Database File: summit 29n-29hz.db
 Dataset Pathname: pass5
 Presentation Format: scbl02
 Dataset Creation: Mon Dec 29 14:49:29 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

-9	CCL	1	0	AMP (mV)	100	0	AMPAVG	150	200	VDL	1200	1	SECTOR MAP	8
0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPMAX	150				10		60
						0	AMPMIN	150						



200

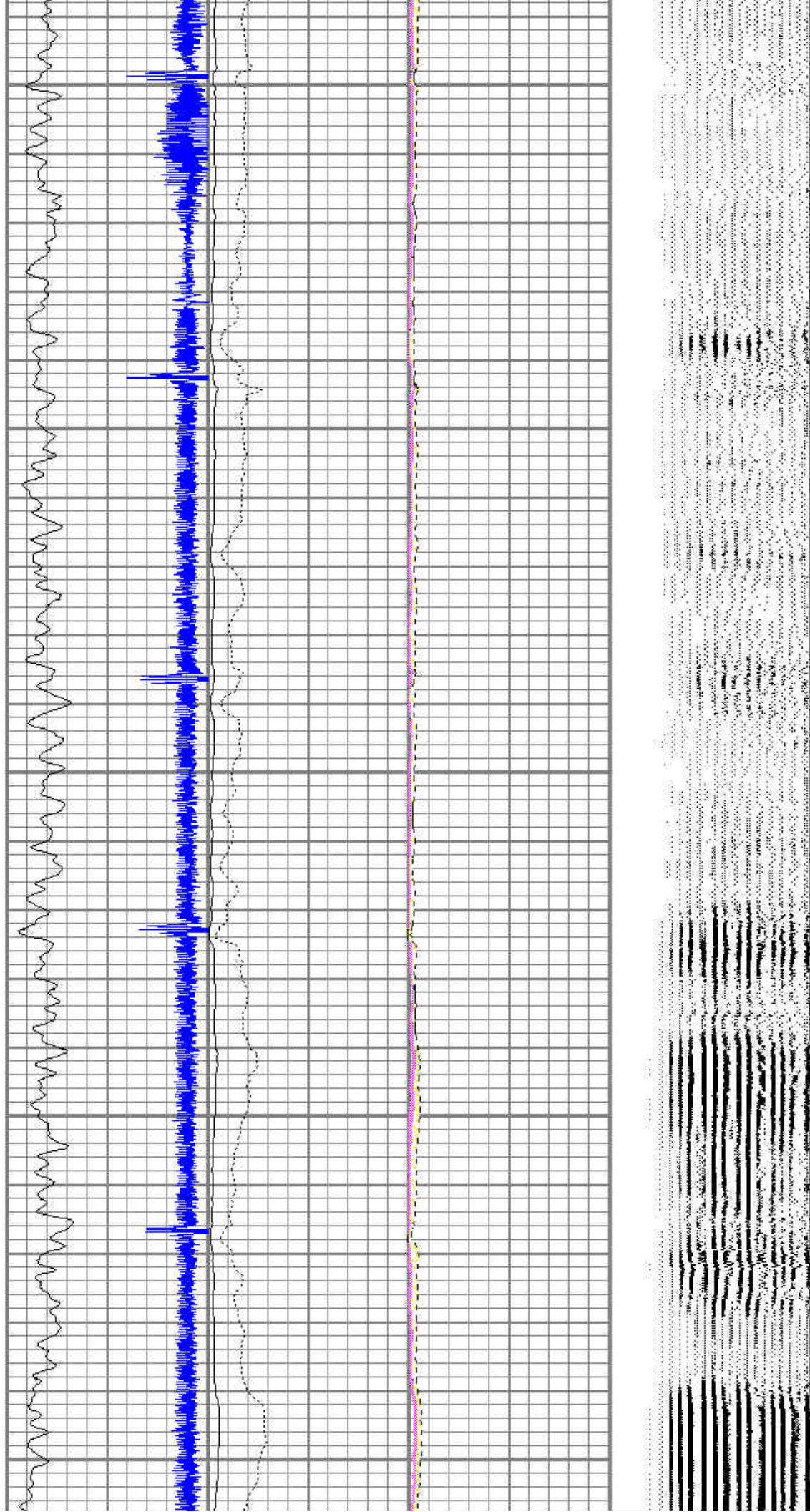
300



400

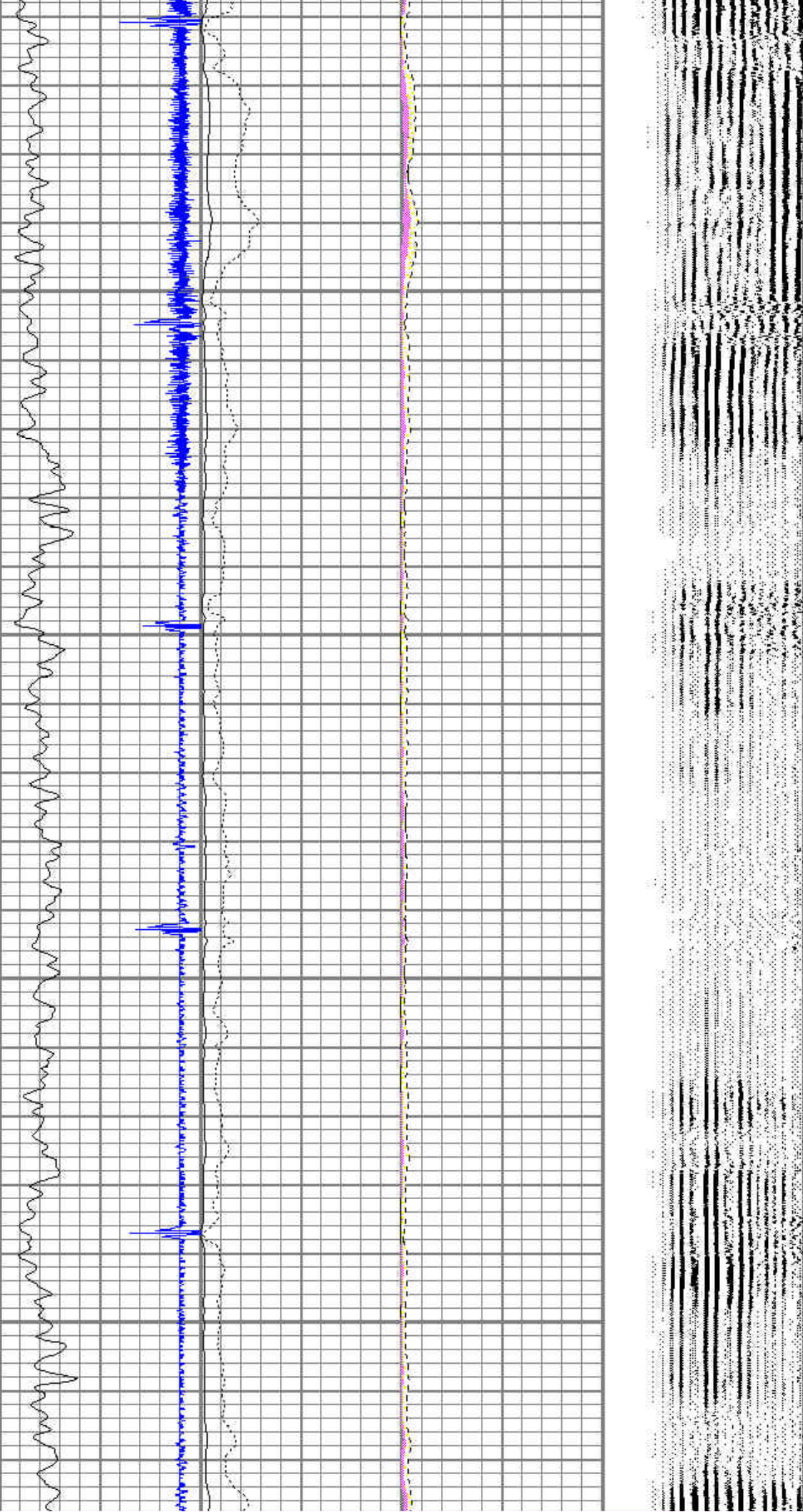
500

600



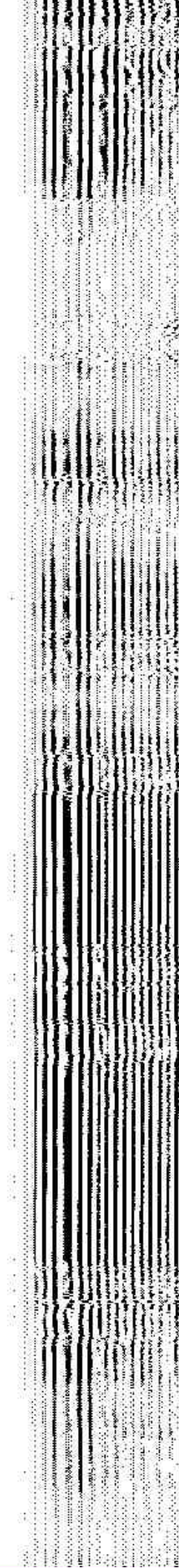
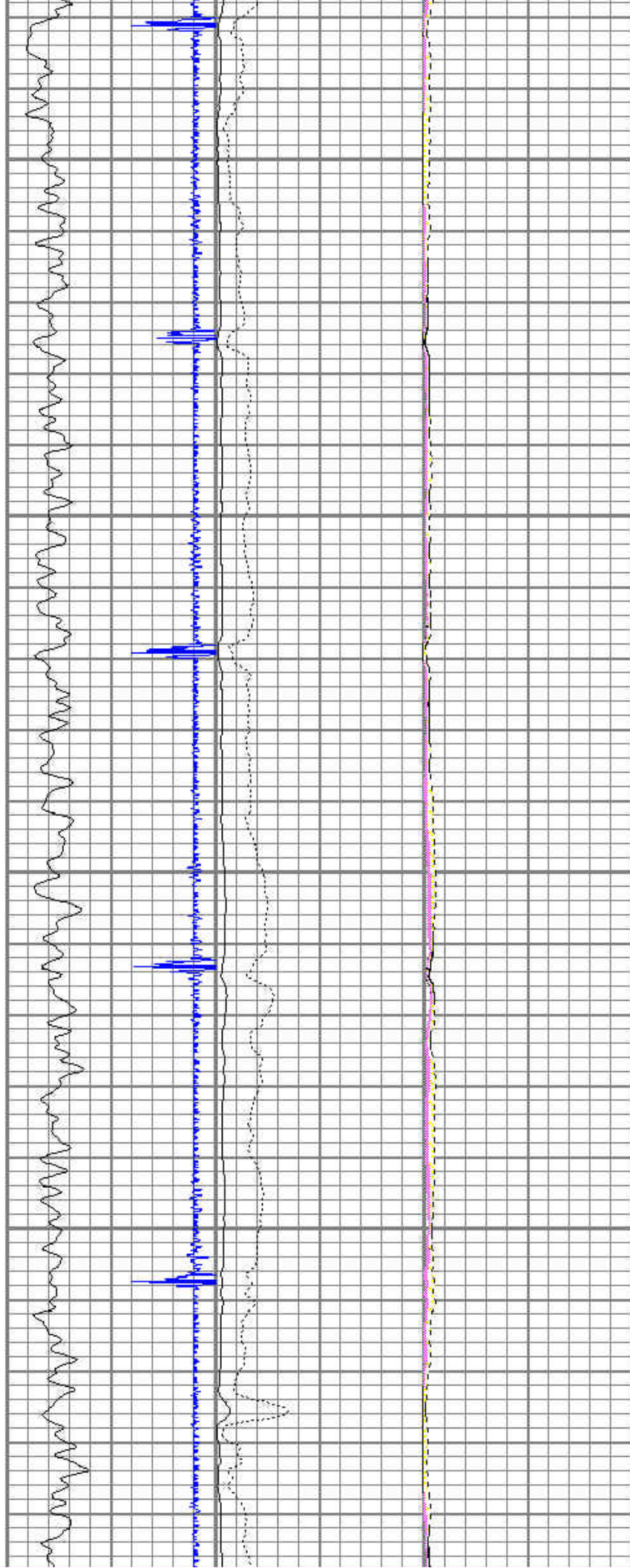
700

800

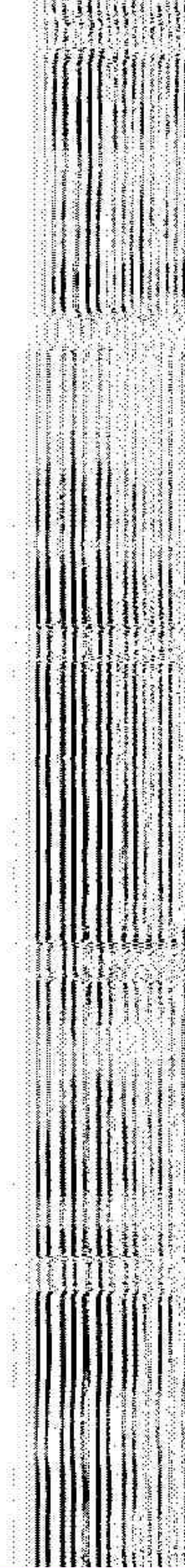
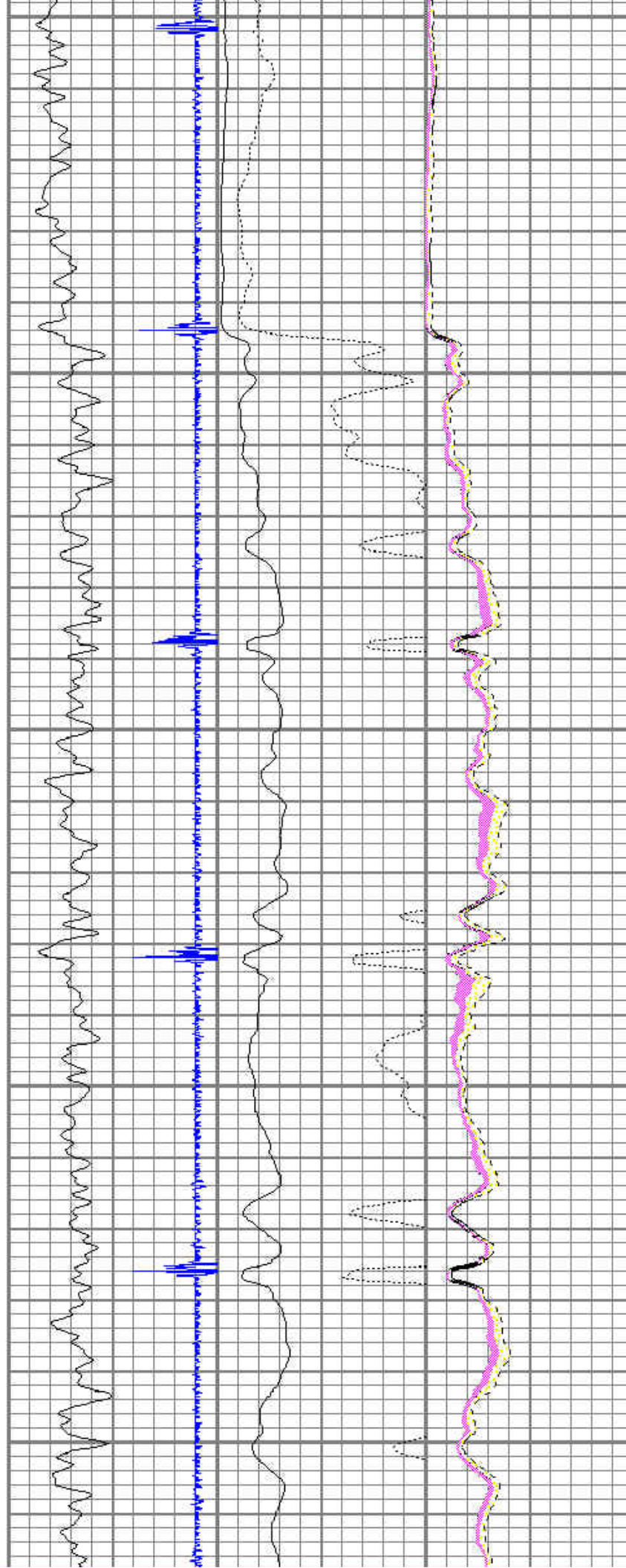


900

1000

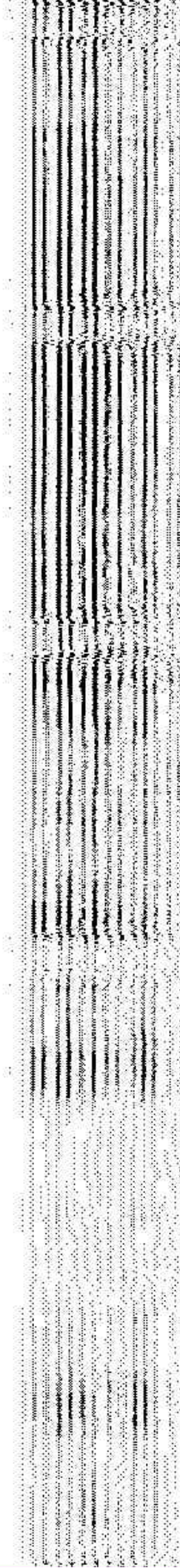
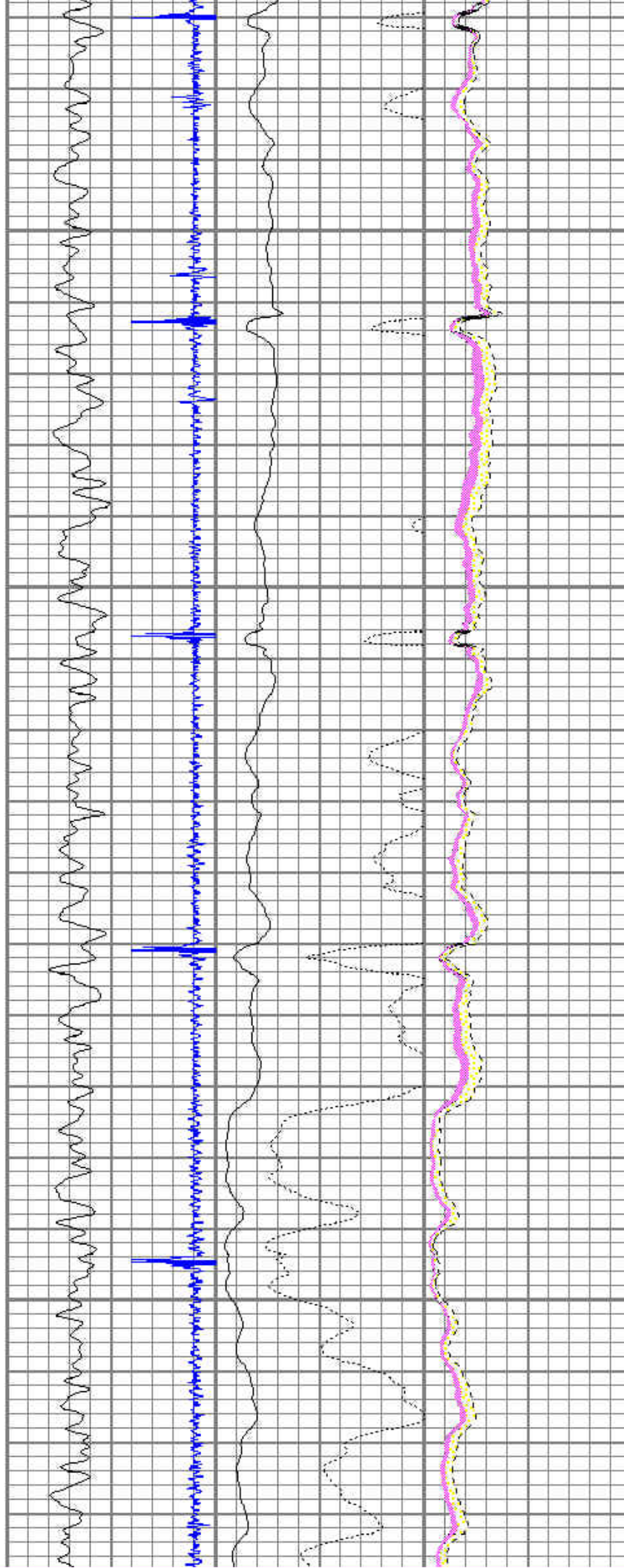


1200



1300

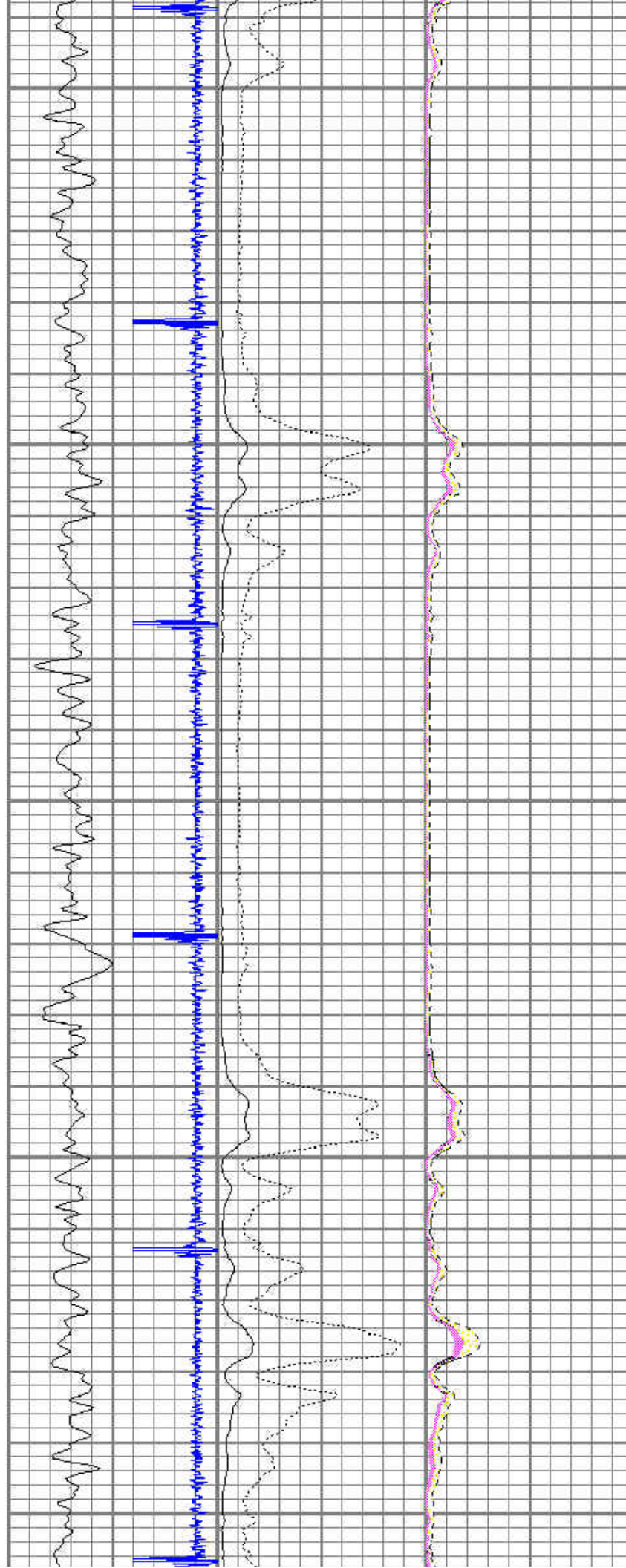
1400



1500

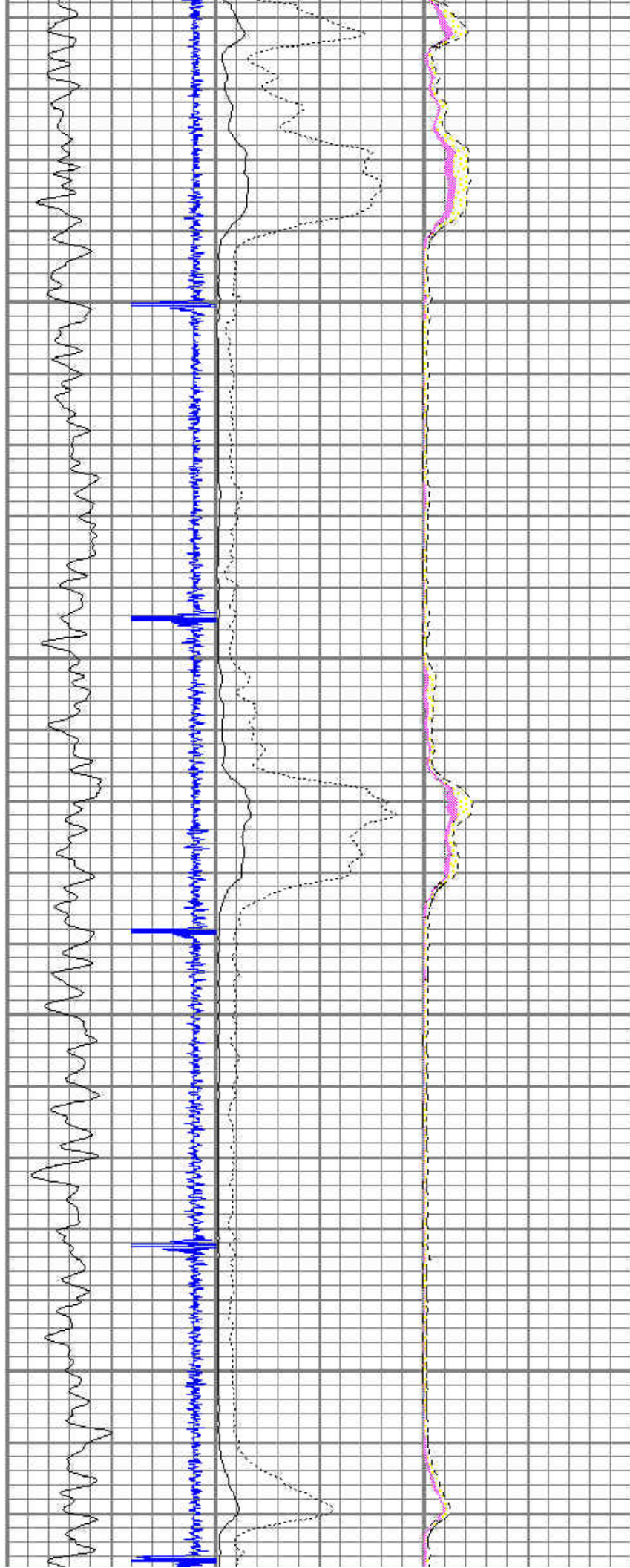
1600

1700



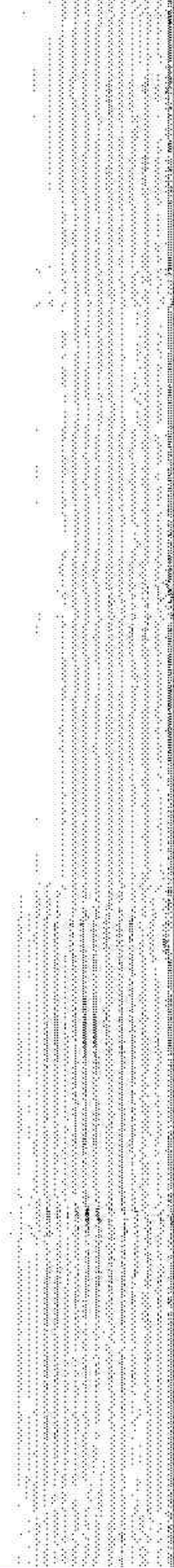
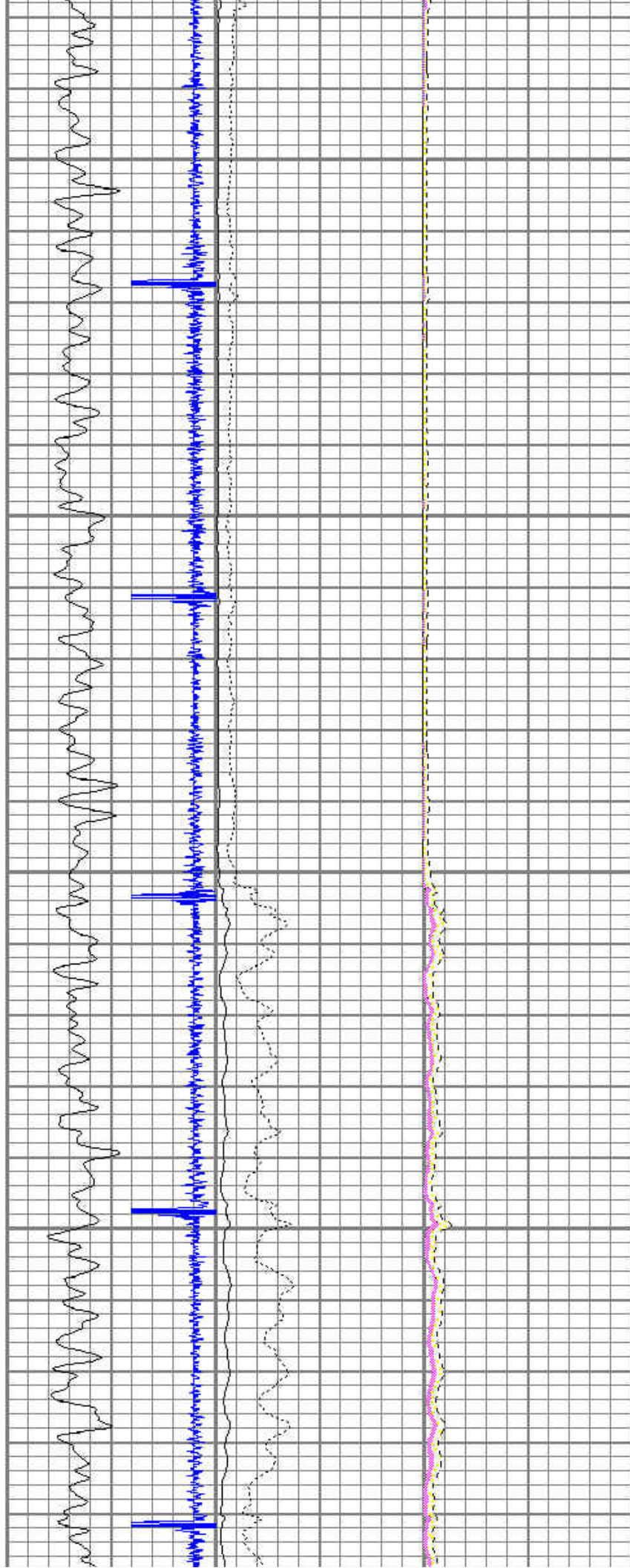
1800

1900



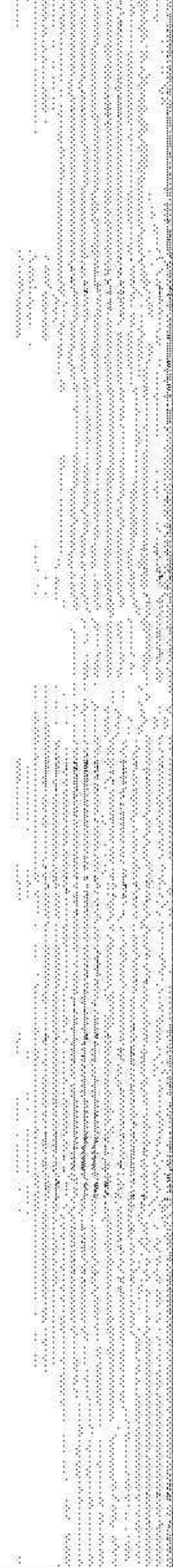
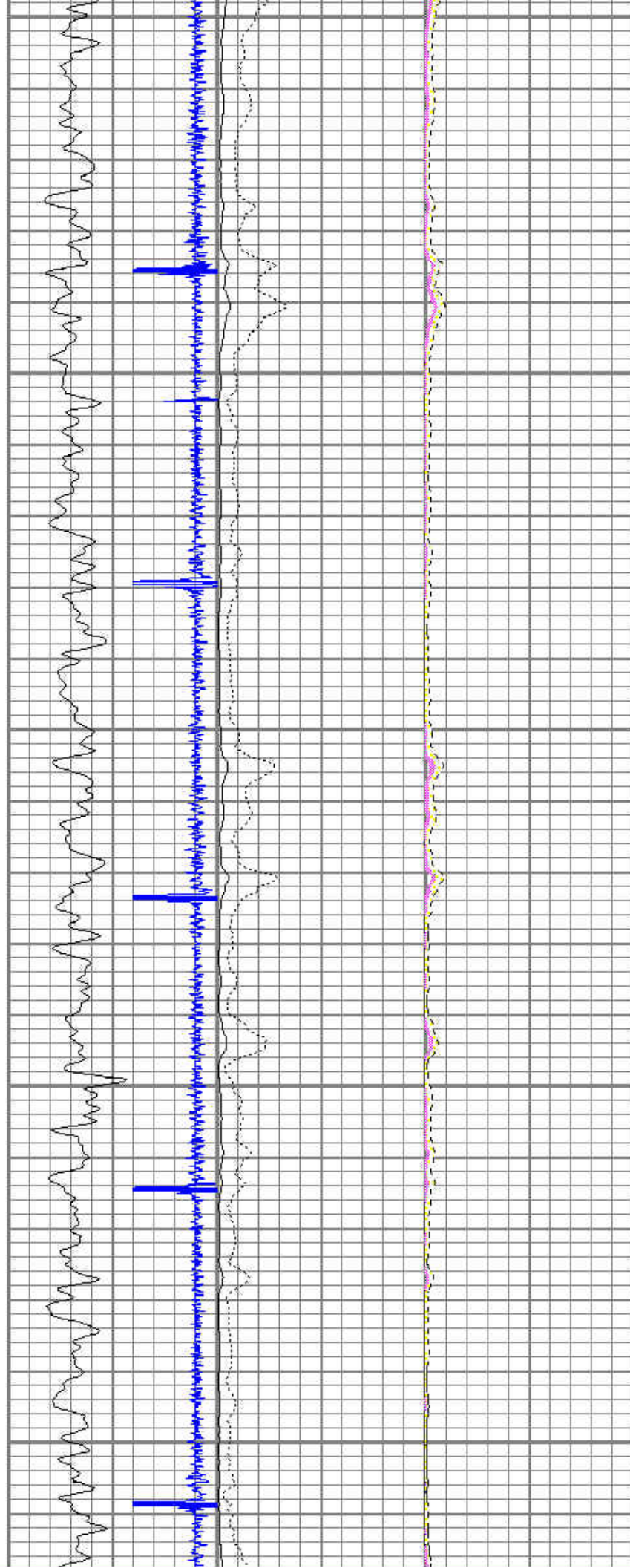
2000

2100



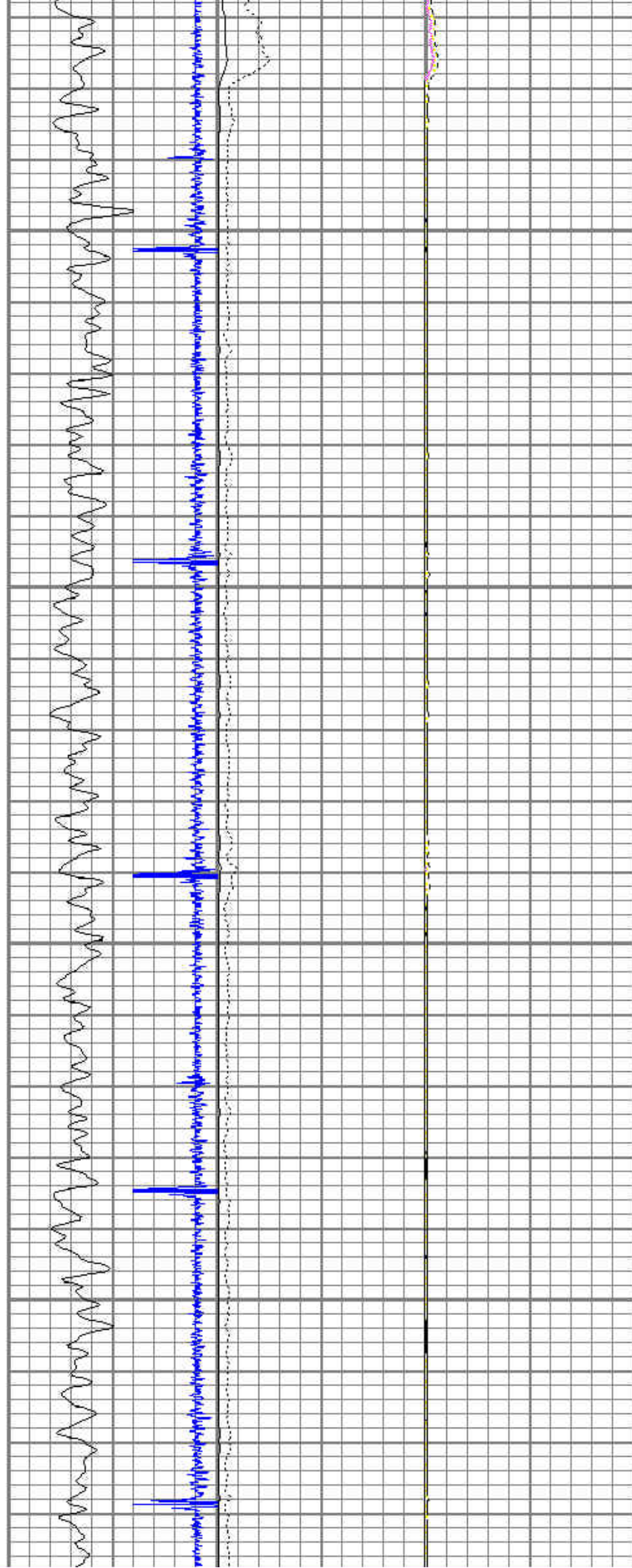
2200

2300



2400

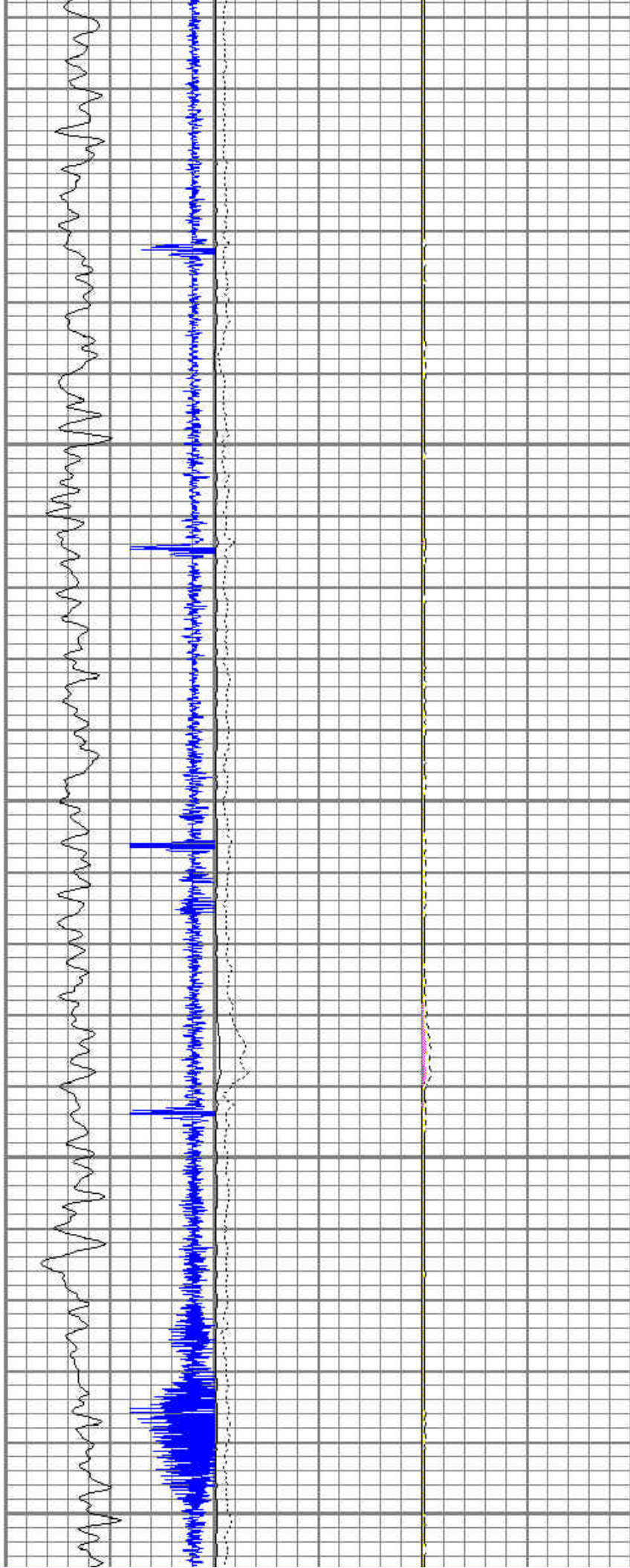
2500



2600

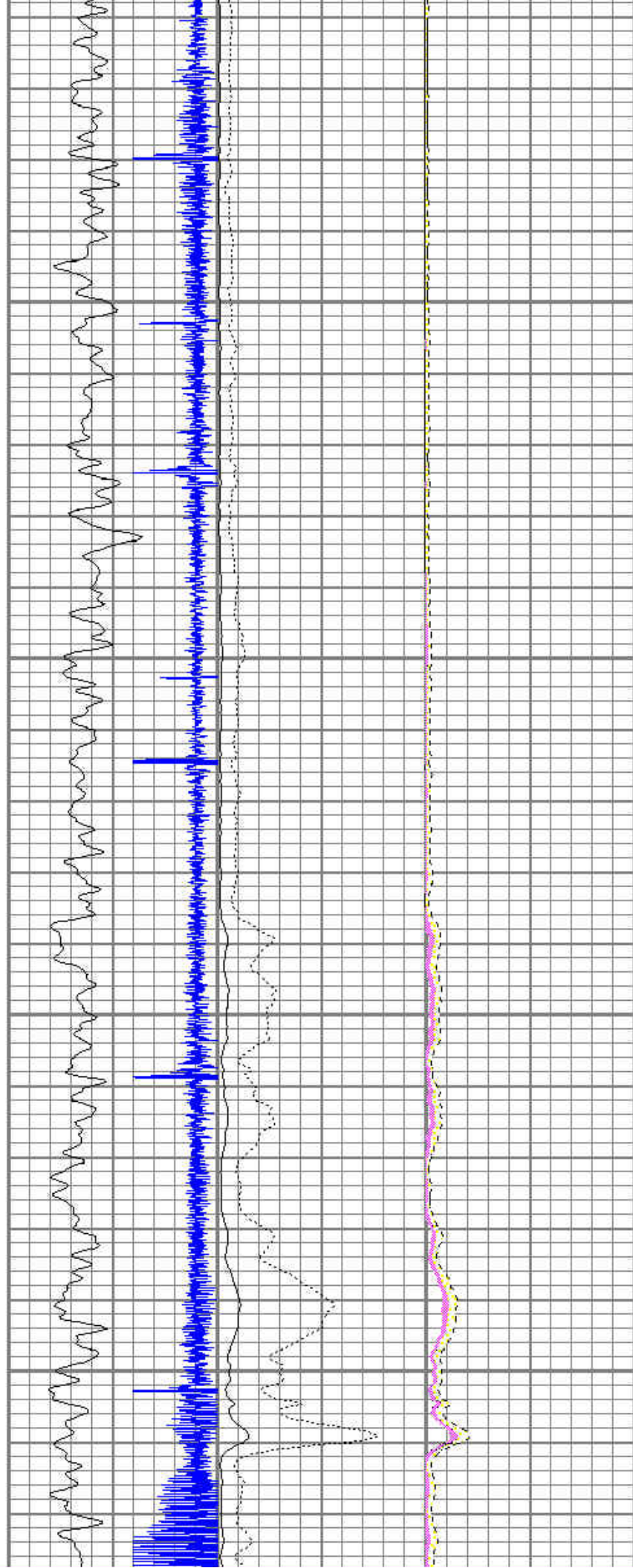
2700

2800



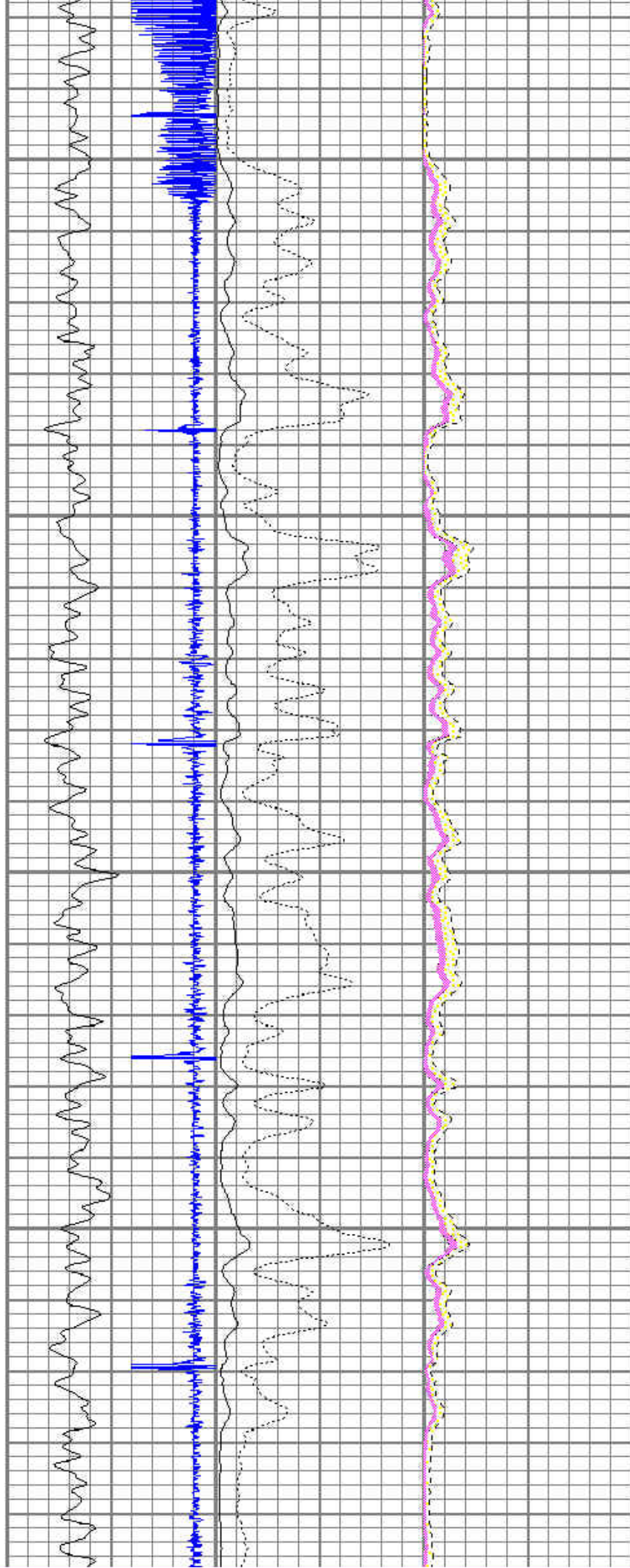
2900

3000



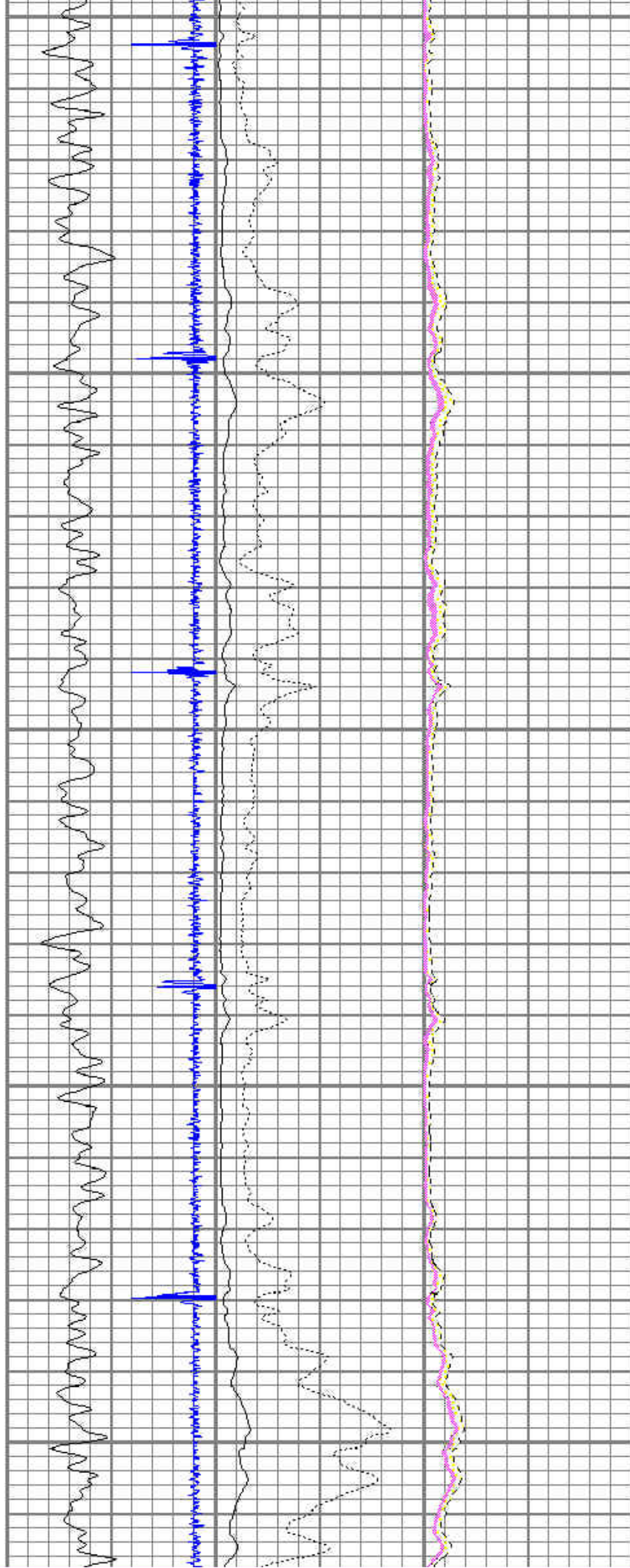
3100

3200



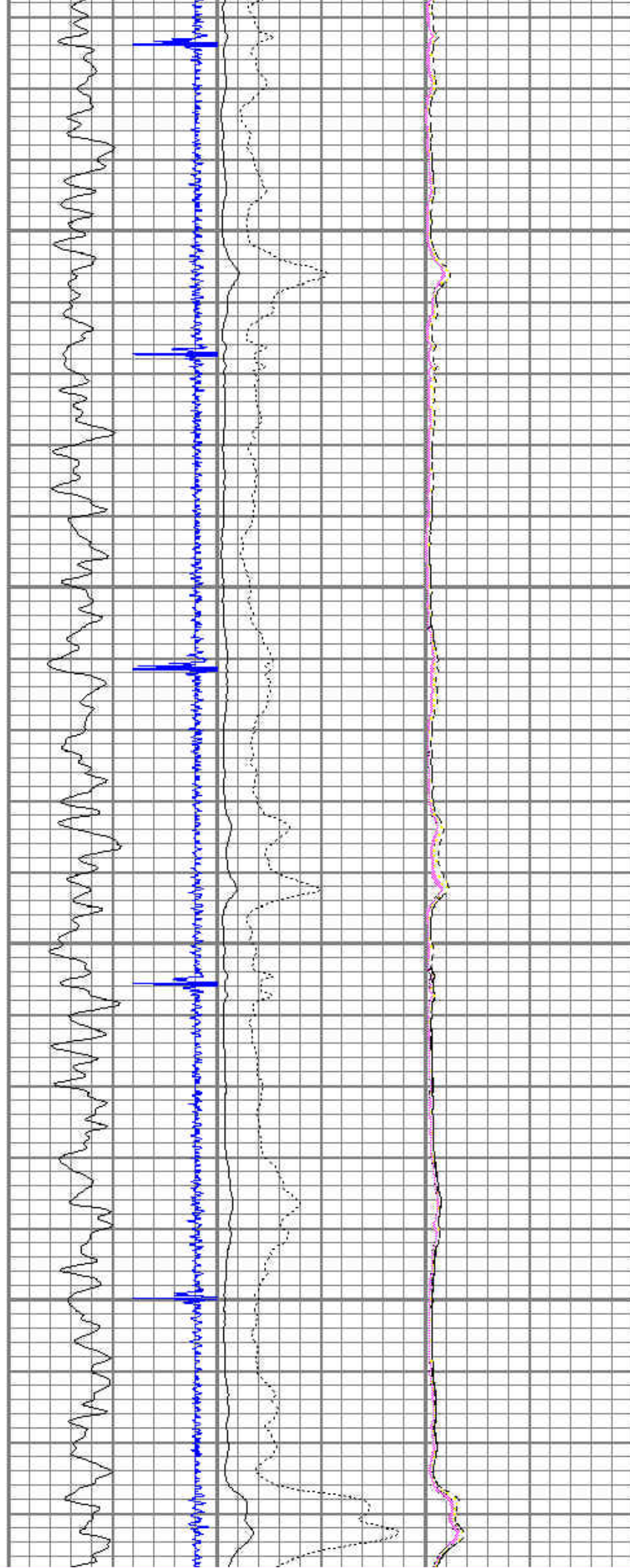
3300

3400



3500

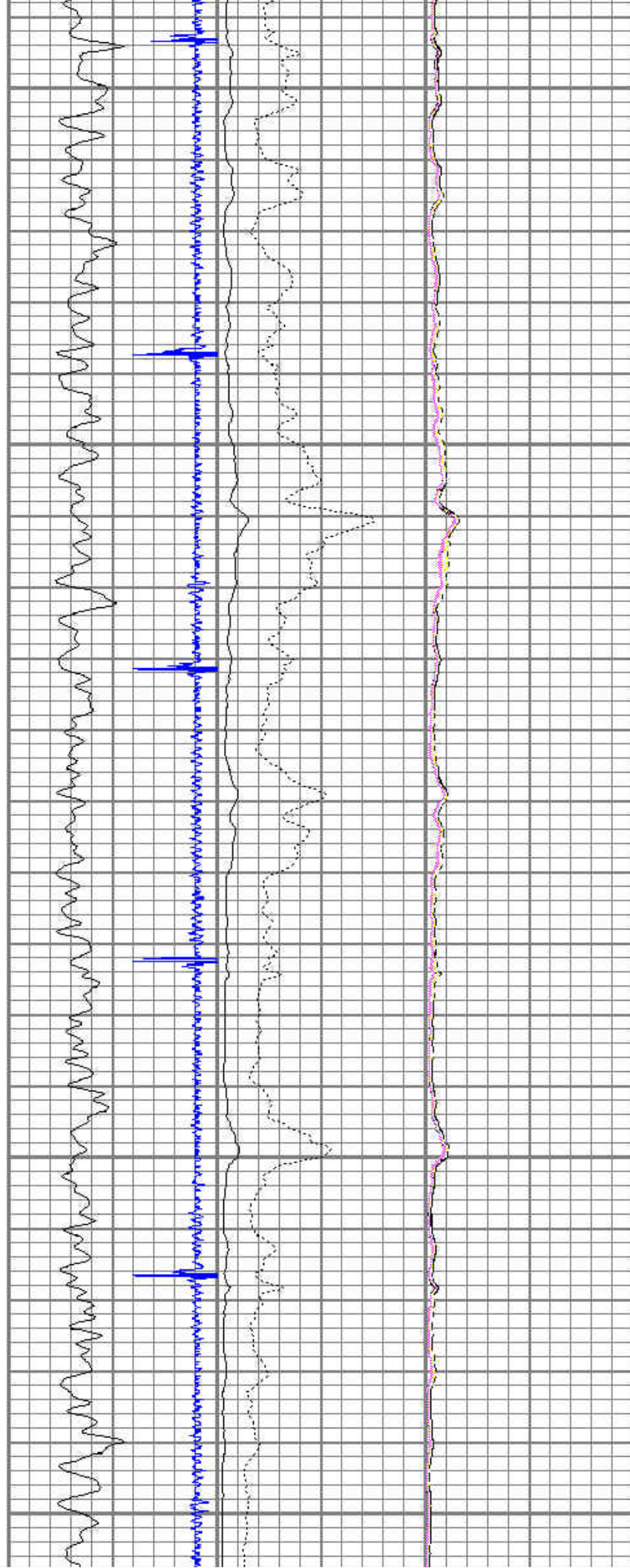
3600



3700

3800

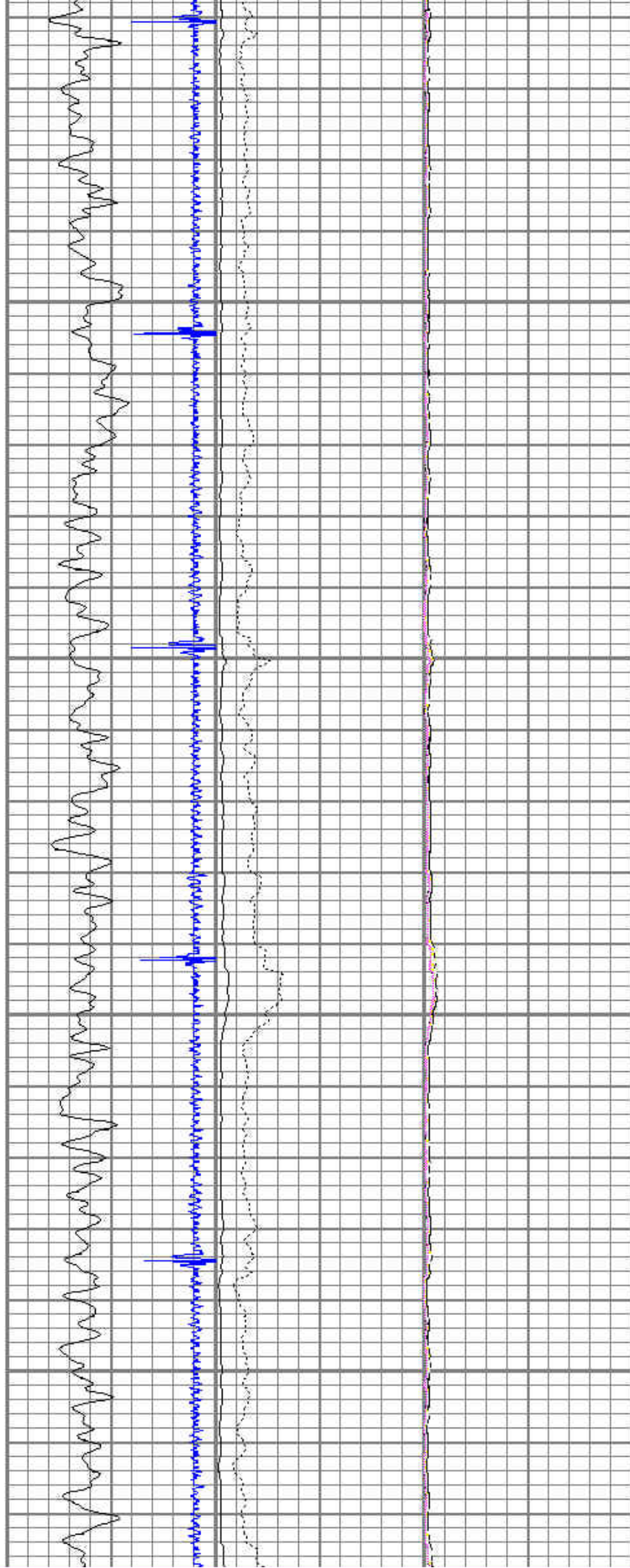
3900



Seismic data visualization showing multiple stacked traces. The top trace is a high-frequency signal, likely a seismic waveform. Below it are several other traces, including a blue trace with sharp vertical spikes and a magenta trace. The traces are plotted against a vertical axis with major grid lines at 3700, 3800, and 3900. The blue trace has four prominent spikes pointing upwards, located at approximately 3710, 3740, 3780, and 3820 on the vertical scale.

4000

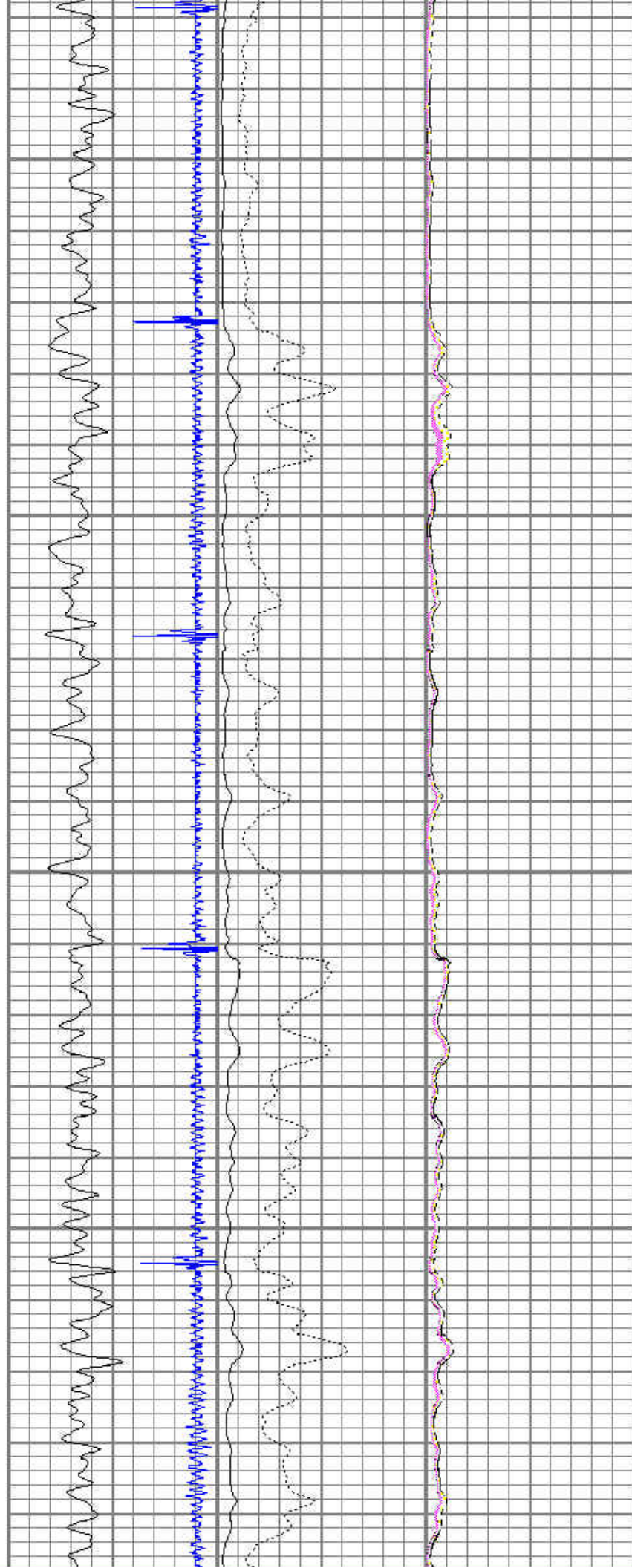
4100



Seismic recording showing three distinct traces. The top trace is a high-frequency, high-amplitude signal, likely representing a seismic wave. The middle trace is a lower-frequency, lower-amplitude signal, possibly representing a different seismic component or a processed version of the same data. The bottom trace is a very low-frequency, low-amplitude signal, which could be a baseline or a very low-frequency component of the seismic data. The traces show significant fluctuations and peaks, particularly in the upper traces.

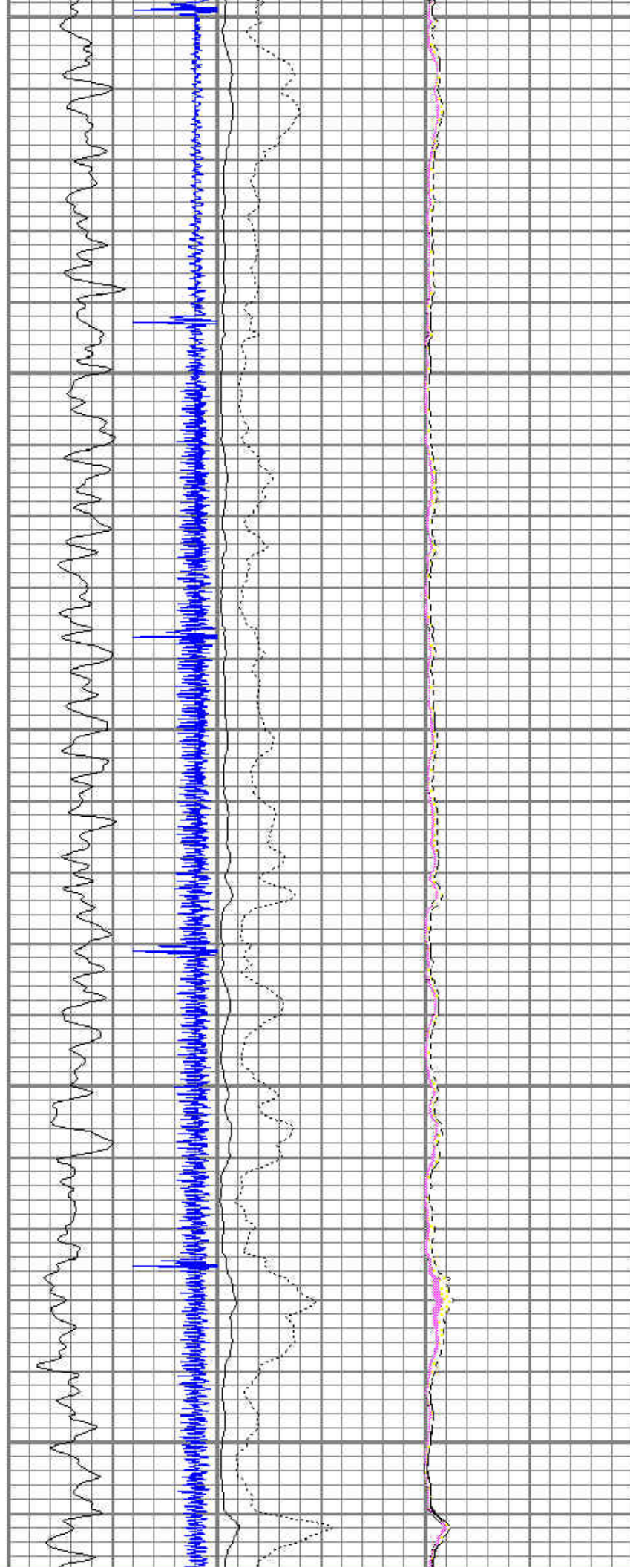
4200

4300



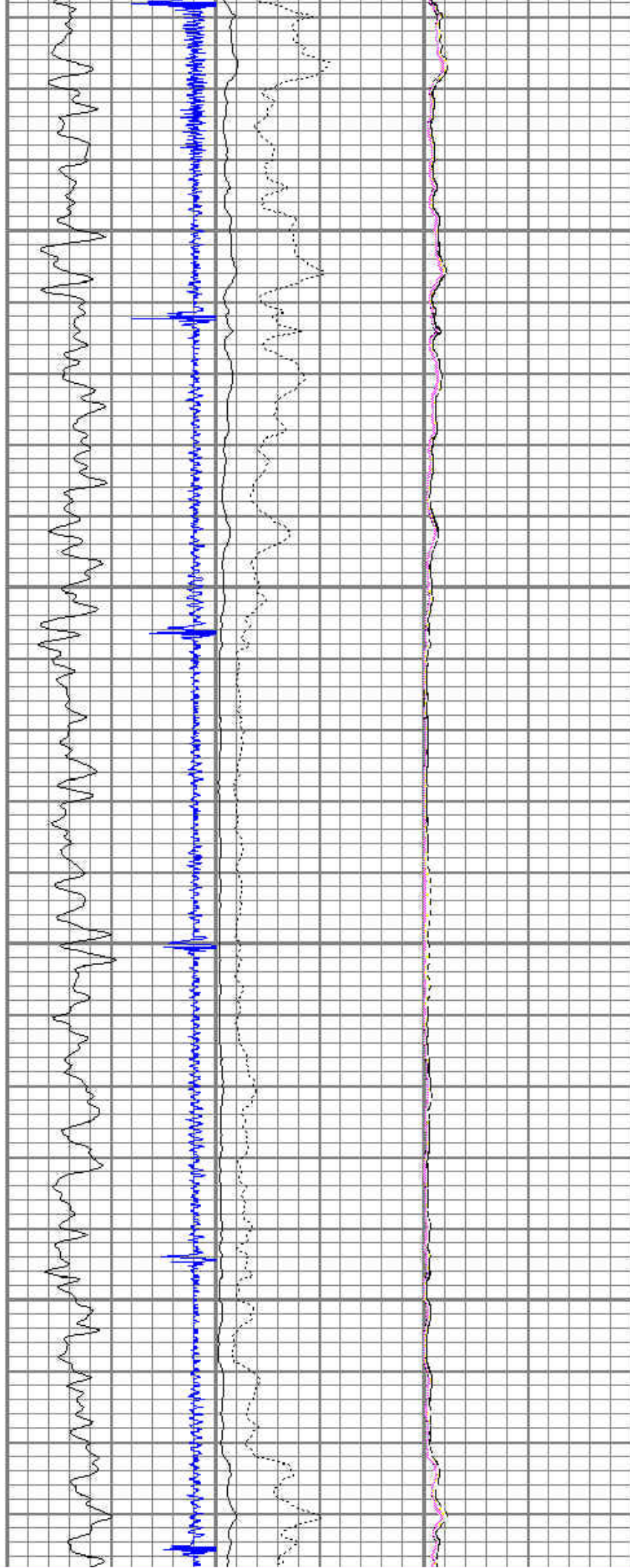
4400

4500



4600

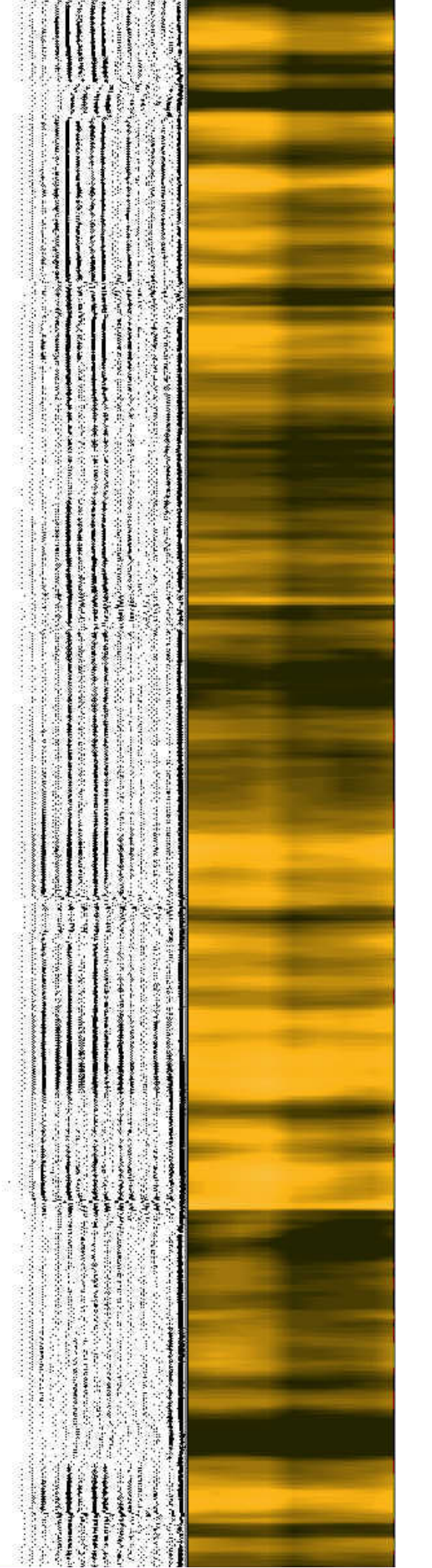
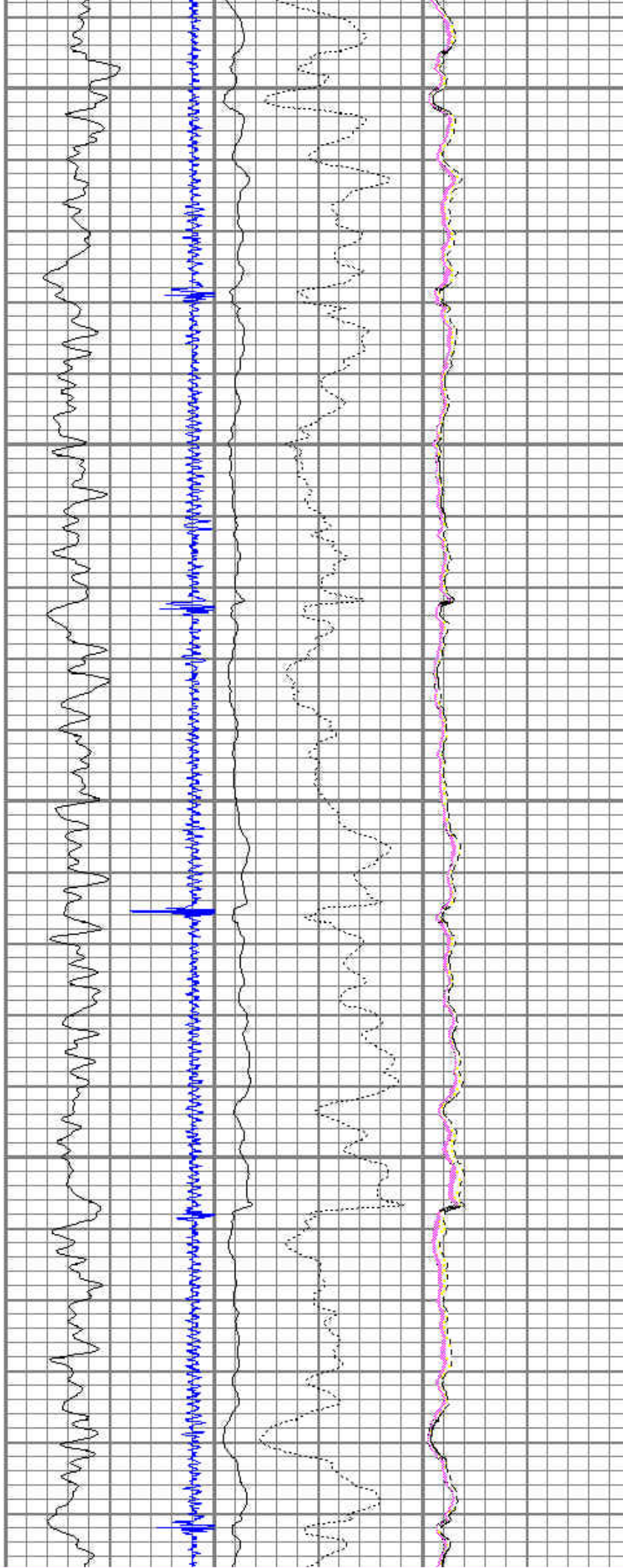
4700



4800

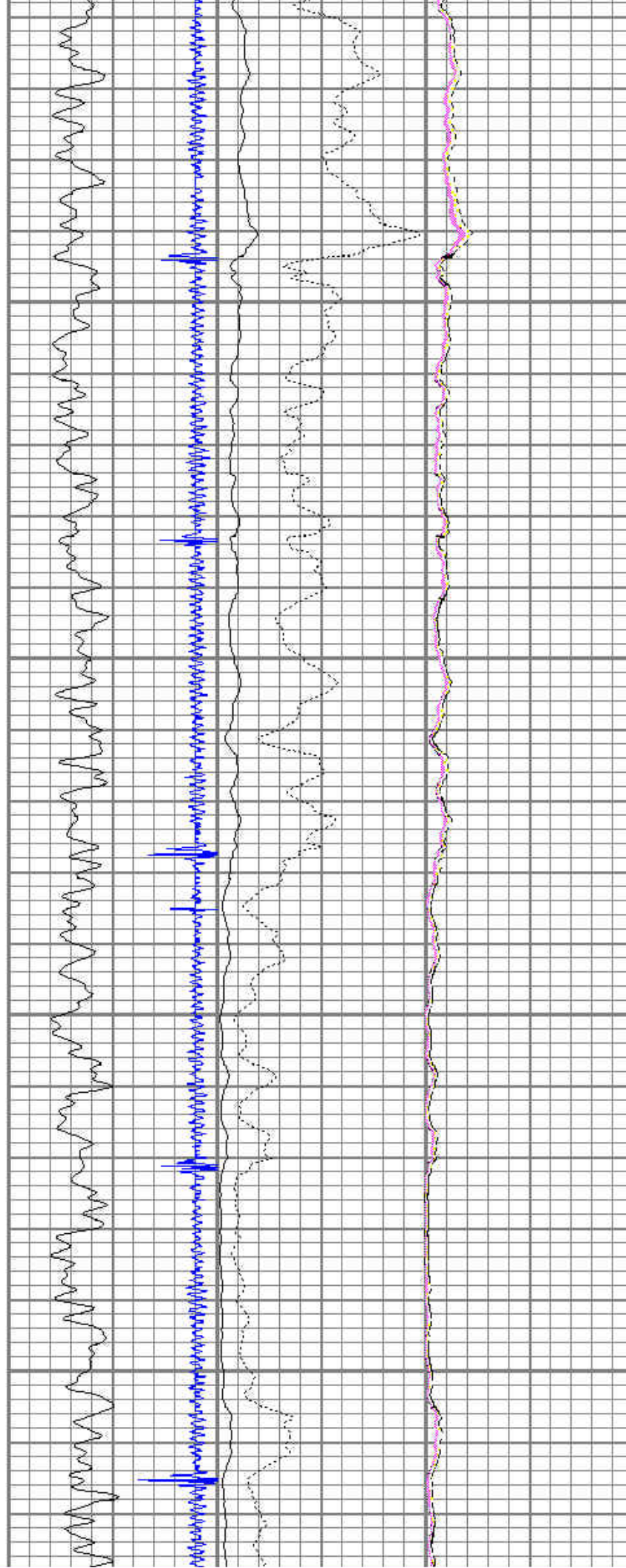
4900

5000



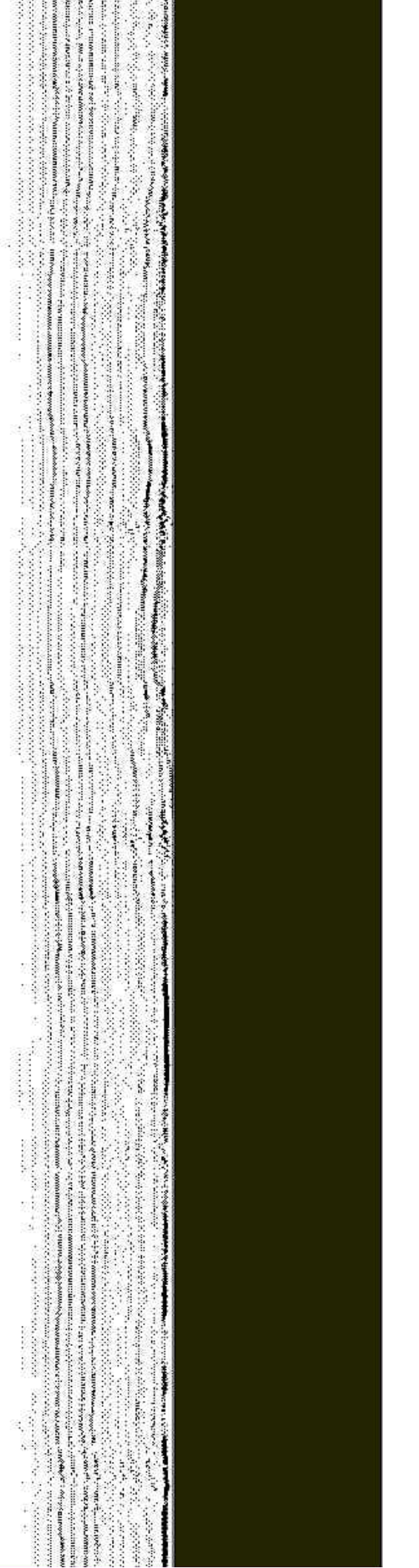
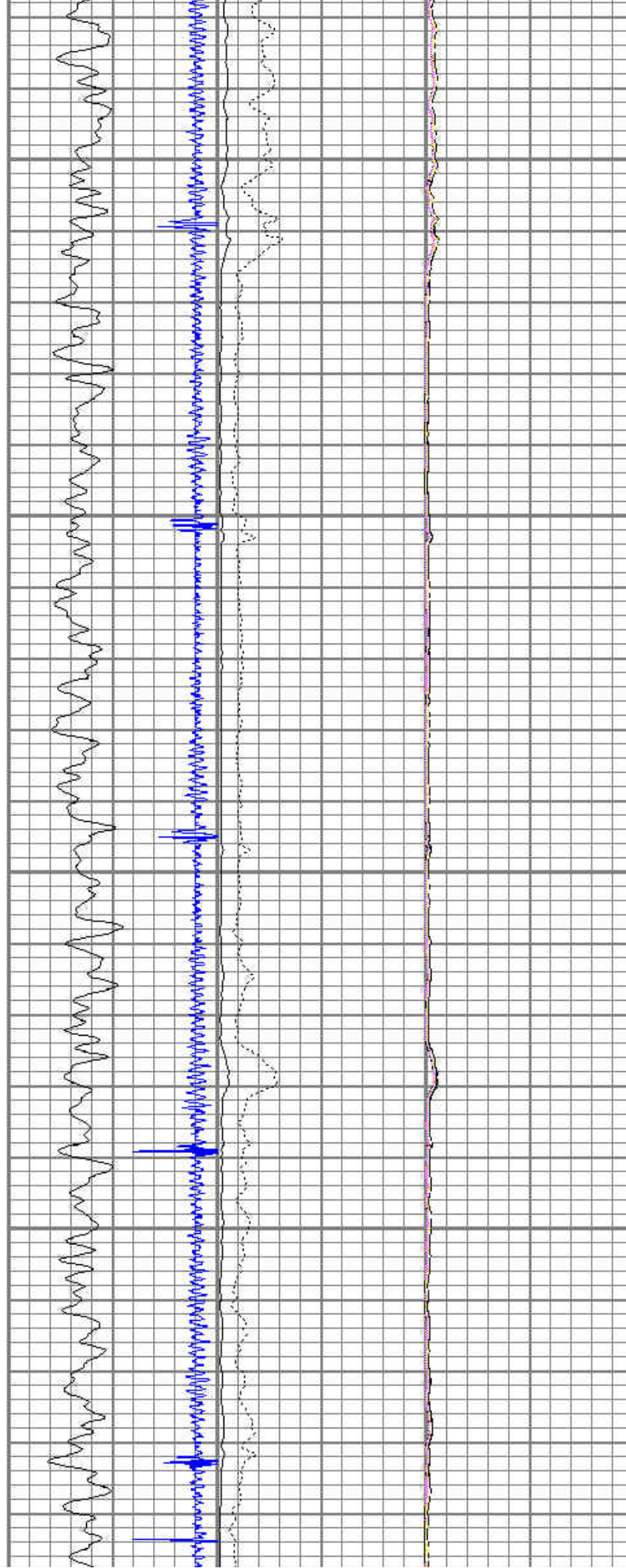
5100

5200



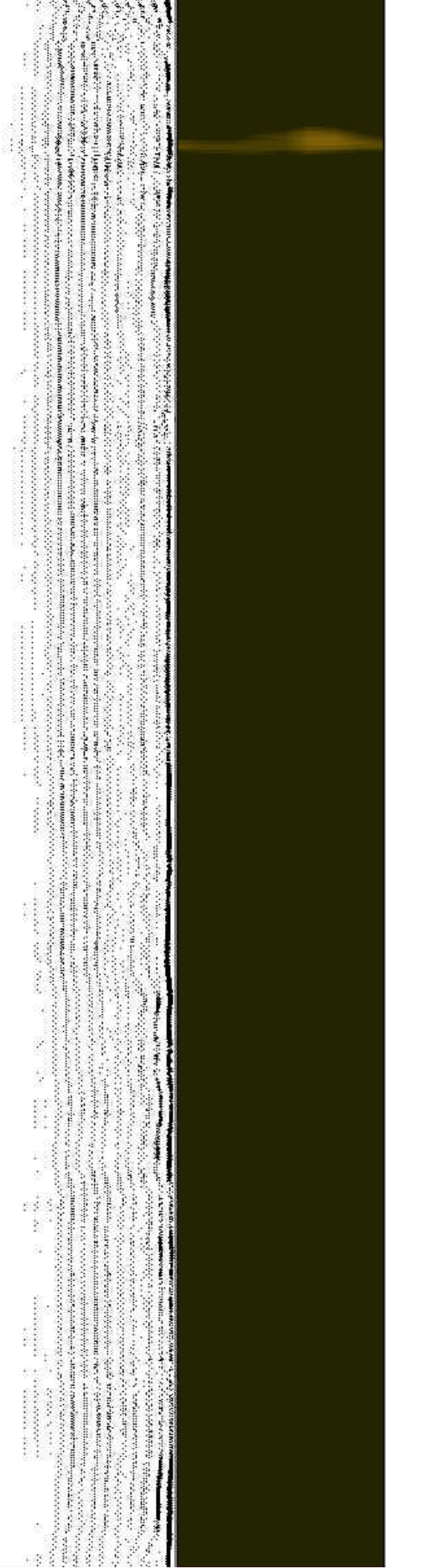
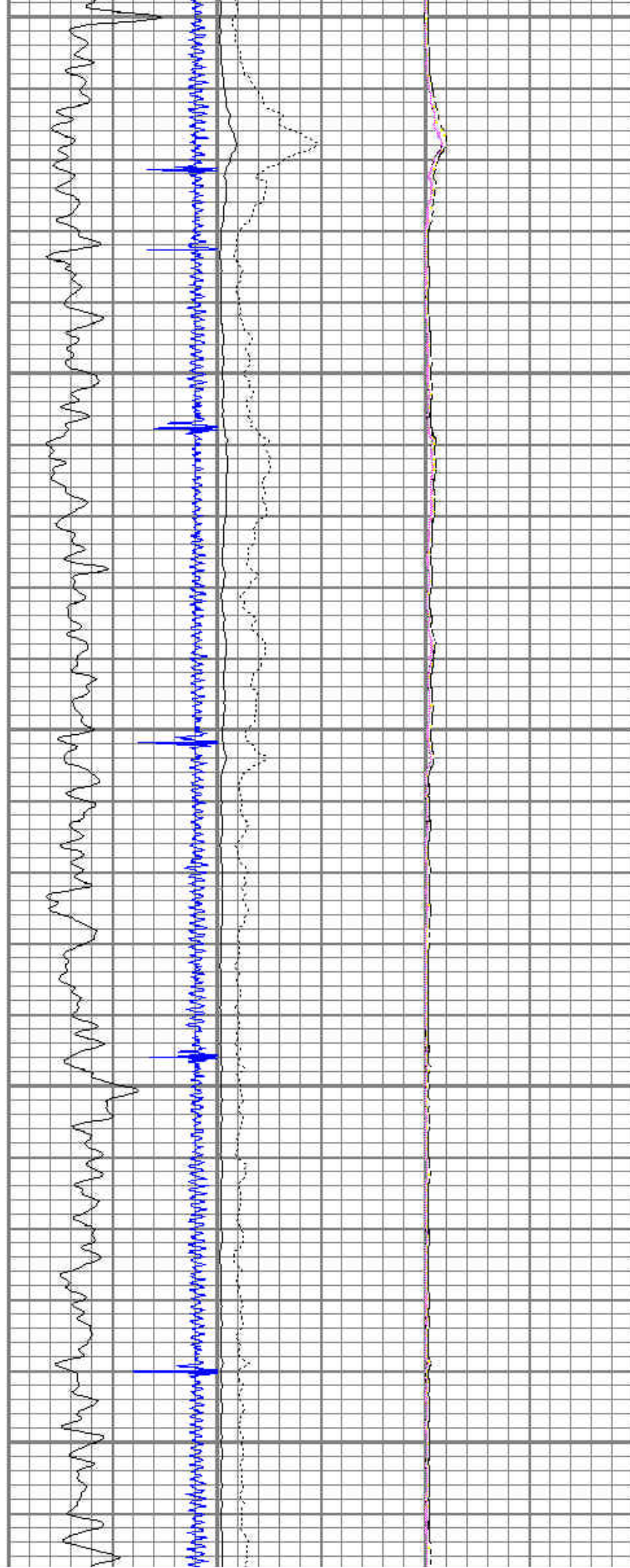
5300

5400



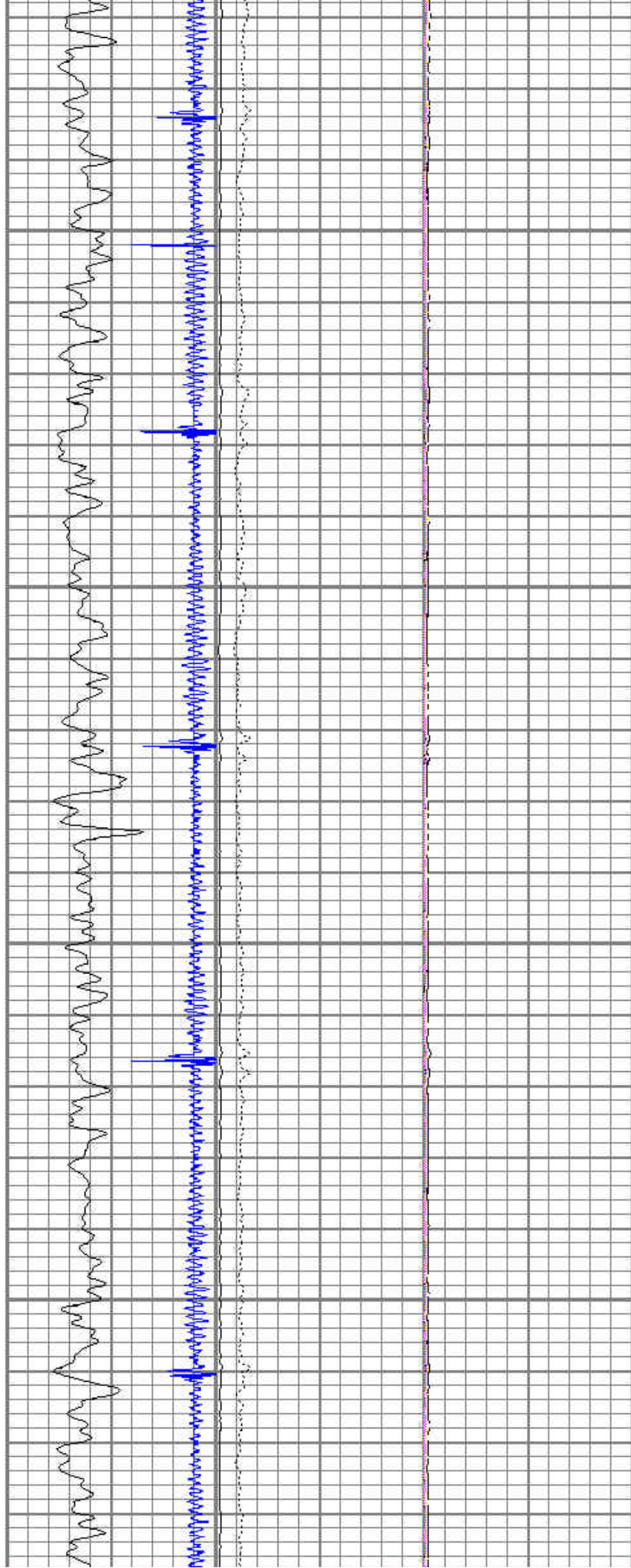
5500

5600



5700

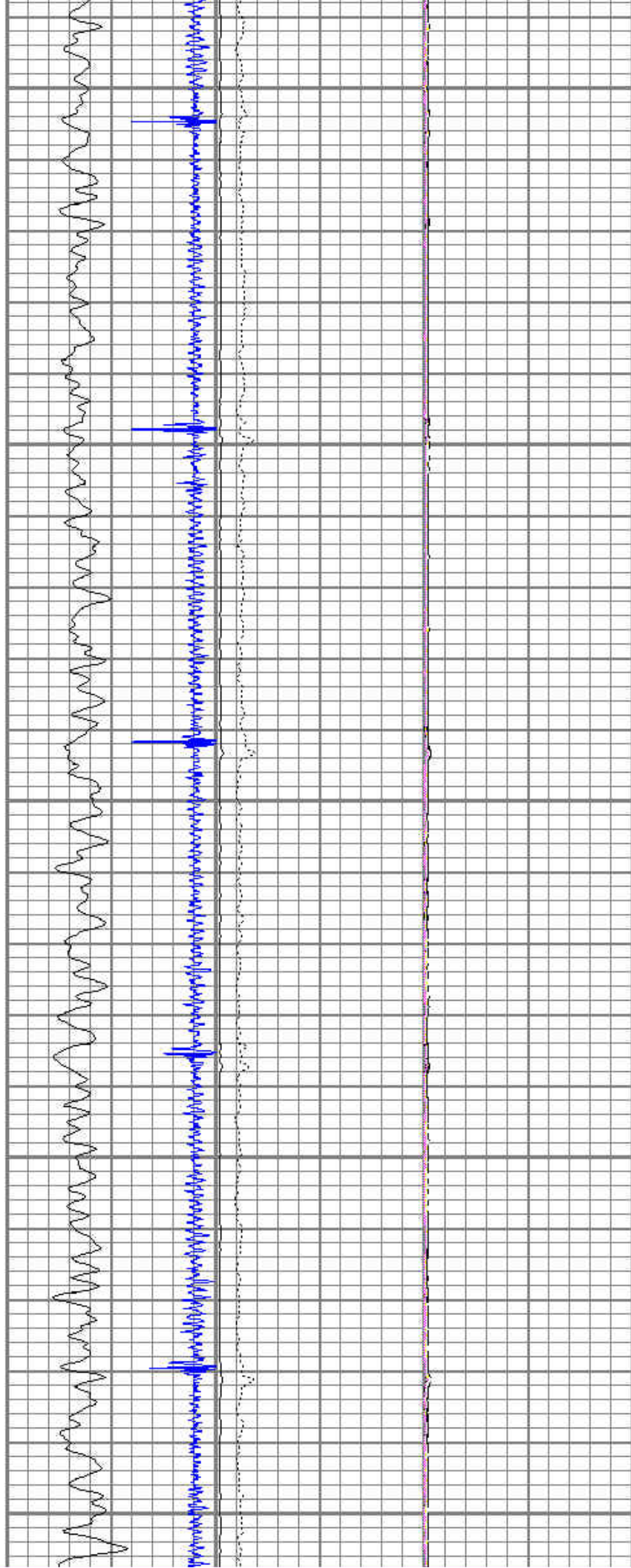
5800



5900

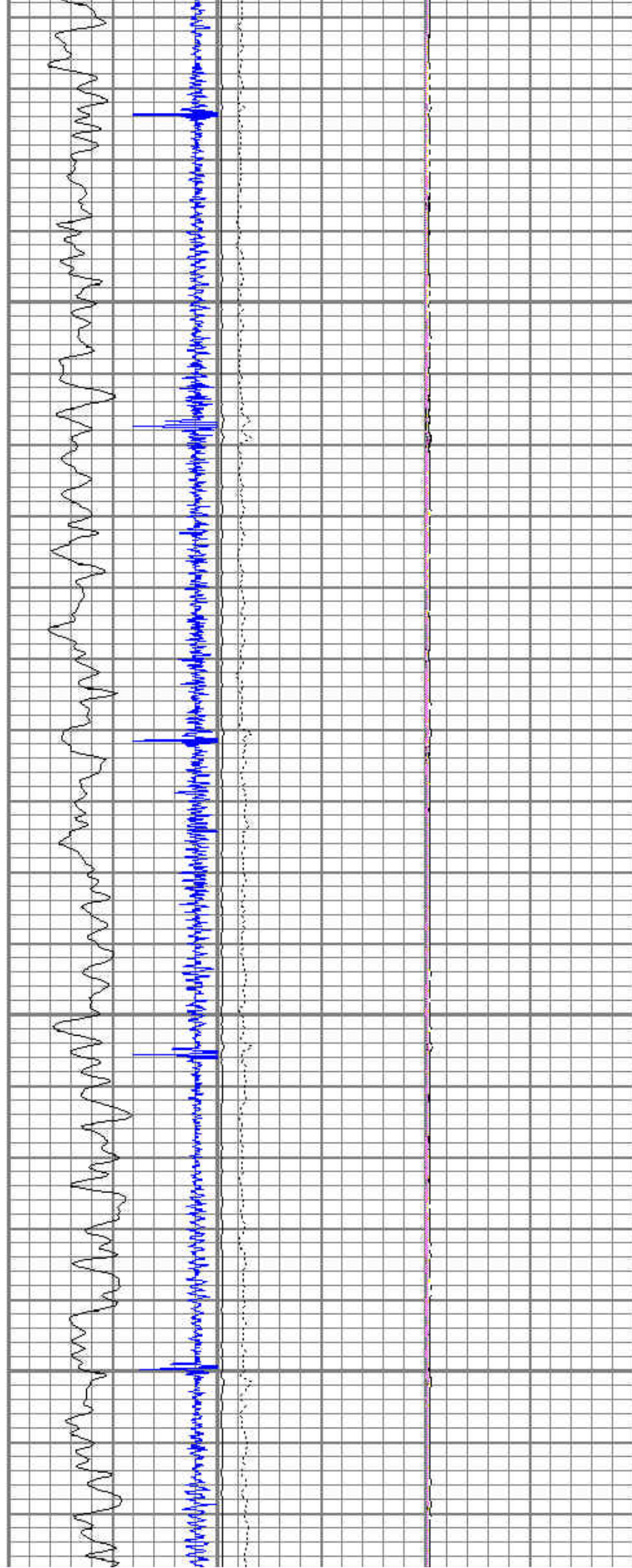
6000

6100



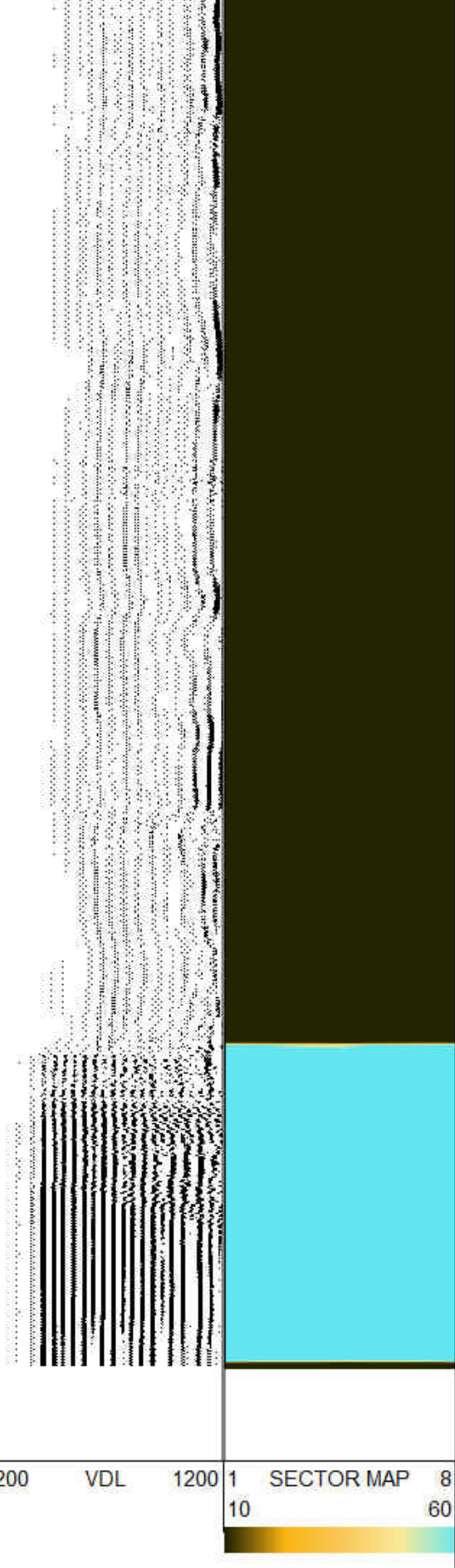
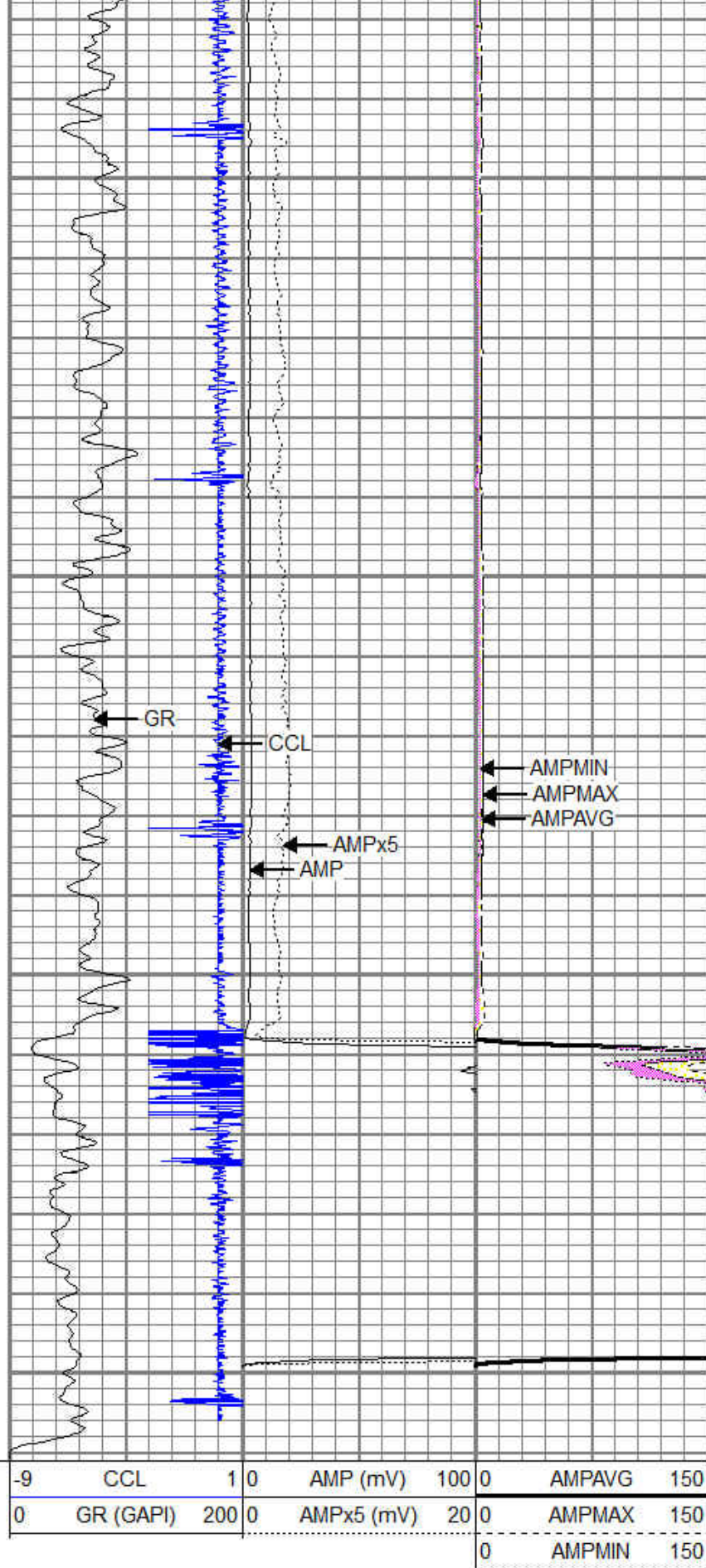
6200

6300



6400

6500

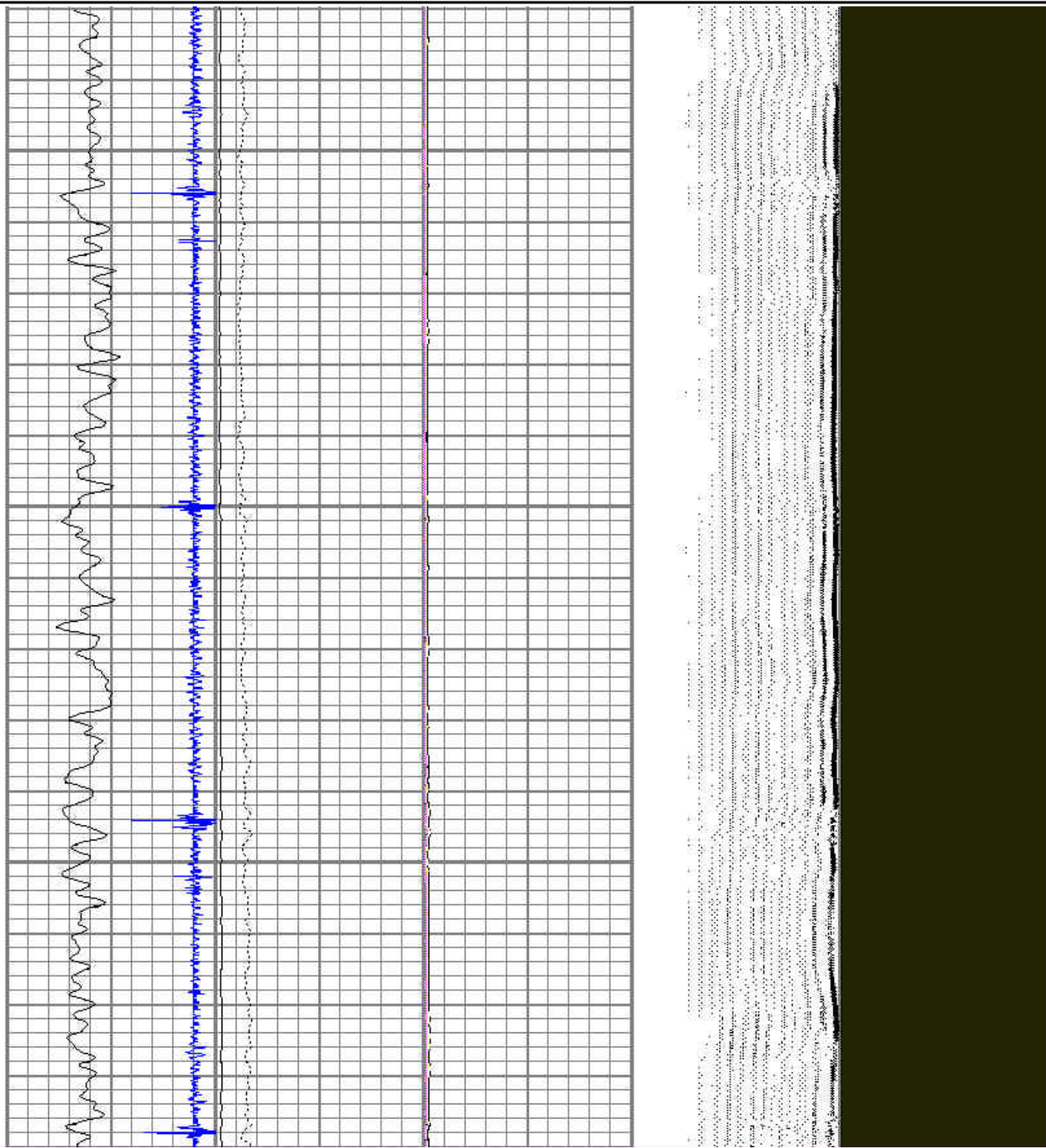


REPEAT PASS 2800 PSI

Database File: summit 29n-29hz.db
 Dataset Pathname: pass3
 Presentation Format: scbl02
 Dataset Creation: Mon Dec 29 14:15:53 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

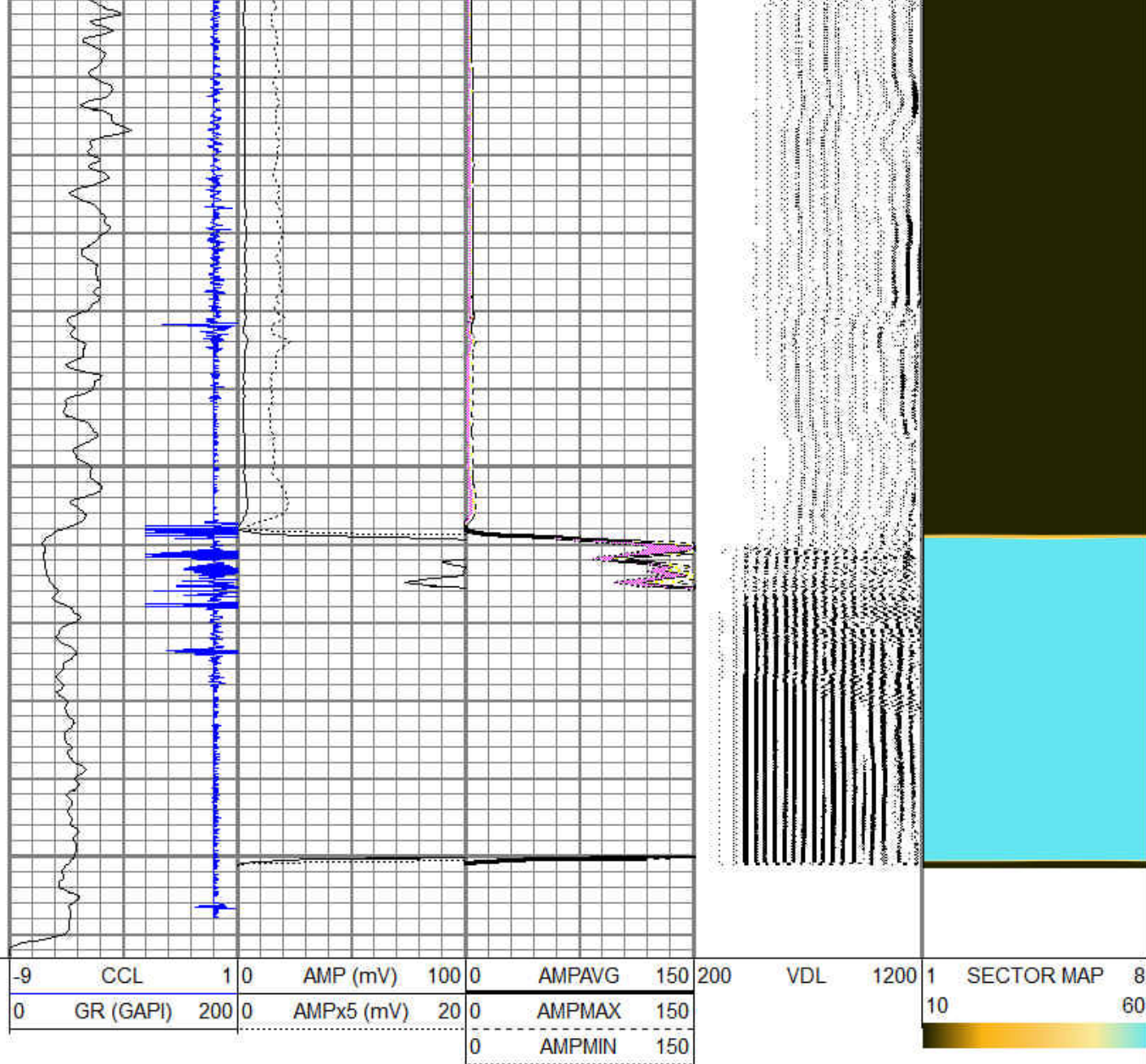
-9	CCL	1	0	AMP (mV)	100	0	AMPAVG	150	200	VDL	1200	1	SECTOR MAP	8
0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPMAX	150				10		60
						0	AMPMIN	150						

6300



6400

6500



Pioneer Energy Services

REPEAT PASS 2800 PSI

Calibration Report

Database File: summit 29n-29hz.db
 Dataset Pathname: pass5
 Dataset Creation: Mon Dec 29 14:49:29 2014 by Log 7.0 B1

Temperature Calibration Report

Serial Number: 0001
 Tool Model: 1.375TEMP
 Performed: Wed Mar 15 15:39:51 2006

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	100.00 degF	1000.00degF

Gain: 0.10
 Offset: 0.00

Gamma Ray Calibration Report

Serial Number: 111211
Tool Model: Probe
Performed: Fri Jul 04 19:57:30 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 070132
Tool Model: Probe

Calibration Casing Diameter: 7.000 in
Calibration Depth: 122.827 ft

Master Calibration, performed Wed Sep 10 13:49:01 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.018	0.743	1.000	62.165	90.385	-0.235
CAL	1.525	0.757				
5'	0.033	0.653	1.000	62.165	158.674	-3.227
SUM						
S1	0.096	0.749	0.000	100.000	162.150	-1.698
S2	0.011	0.765	0.000	100.000	140.602	-1.400
S3	0.012	0.765	0.000	100.000	140.799	-1.602
S4	0.011	0.762	0.000	100.000	141.257	-1.484
S5	0.019	0.755	0.000	100.000	130.890	-2.631
S6	0.020	0.747	0.000	100.000	134.621	-1.780
S7	0.019	0.745	0.000	100.000	135.887	-1.661
S8	0.018	0.747	0.000	100.000	145.224	-2.466

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	1.525	0.757	1.000	0.000

Air Zero Calibration, performed Wed Sep 10 11:09:27 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	



Company	ANADARKO PETROLEUM
Well	SUMMIT 29N-29HZ
Field	WATTENBERG
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