

**GAMMA RAY C.C.L.
CEMENT BOND V.D.L.**

Company GREATWESTERN OIL & GAS COMP.

Well LINNEBUR UPRR1

Field CHIEFTAN

County ADAMS State COLORADO

Location: API #: 05-001-08829

Other Services

NESE

SEC 29 TWP 2S RGE 63W

Elevation

Permanent Datum	GL	Elevation	5291
Log Measured From	KB		
Drilling Measured From	KB		

K.B.	5,302'
D.F.	5,301'
G.L.	5,291'

Date	12-JUL-2016
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12-JUL-2016

Depth Driller	7,740'
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7,740'

Bottom Logged Interval	2,626'
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2,626'

Open Hole Size	7-7/8"
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7-718"

Density / Viscosity	8.34#
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8.34#

Estimated Cement Top	N/A
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N/A

Time Logger on Bottom	2:08PM
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2:08PM

Location	STERLING, C
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STERLING, CO

Witnessed By	MICHAEL LINDS
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MICHAEL LINDS

Run Number	Bit	From	To
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To

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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[illegible]

Surface String	8-5/8"	24# /
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2471

Production String	4-1/2"	10.5, 11.6
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10:00, 11:00

[illegible]

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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 WAS RAN OFF A 11' K.B.

Calibration Report

Database File: linnebur_uprr1_gwogc.db
Dataset Pathname: pass1
Dataset Creation: Tue Jul 12 14:14:25 2016 by Log 7.0 B1

Gamma Ray Calibration Report

Type / Serial:

Probe275dig / 080827

SHOP CALIBRATION

Tue Oct 21 10:39:19 2008

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.6250			GAPI/cps

PRIMARY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:	080430	
Tool Model:	Digital	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	271.042	ft

Master Calibration, performed Tue Jul 12 08:20:29 2016:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.894	0.700	71.921	79.947	0.477
CAL						
5'	0.003	0.896	0.700	71.921	79.769	0.472
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

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

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL						

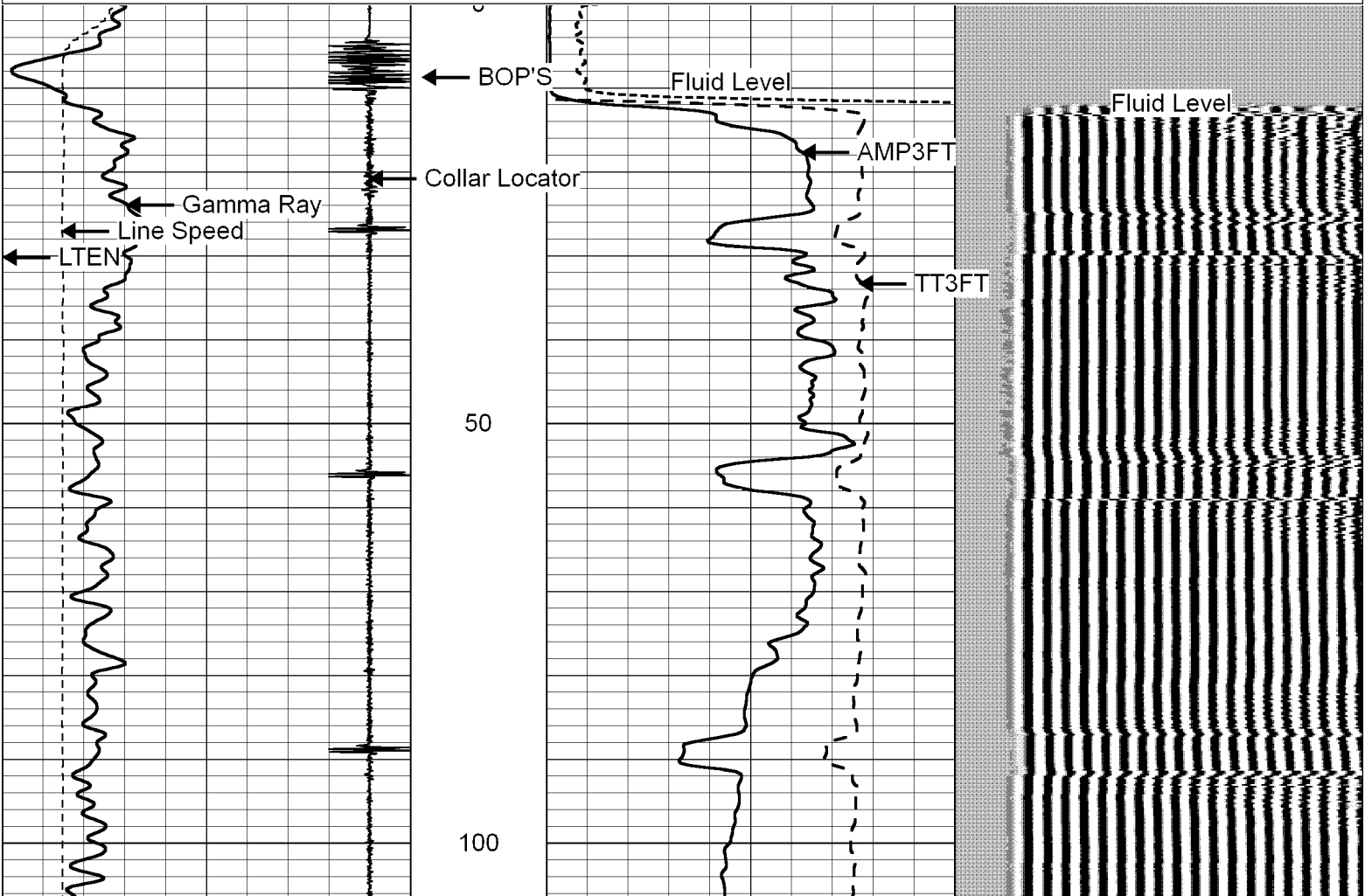
Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

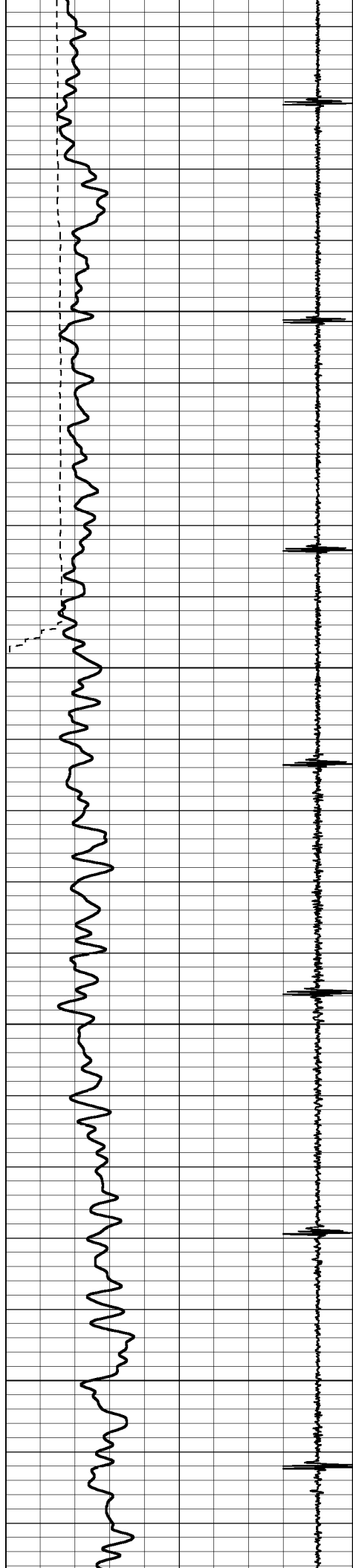
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			

Database File: linnebur_uprr1_gwogc.db
Dataset Pathname: pass1
Presentation Format: radiicbl
Dataset Creation: Tue Jul 12 14:14:25 2016 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

90	Collar Locator	-10
0	Gamma Ray (GAPI)	200
-100	Line Speed (ft/min)	100
0	LTEN (lb)	5000

0	AMP3FT (mV)	100	200	Variable Density	1200
0	AMP x 10 (mV)	10			
305	TT3FT (usec)	205			



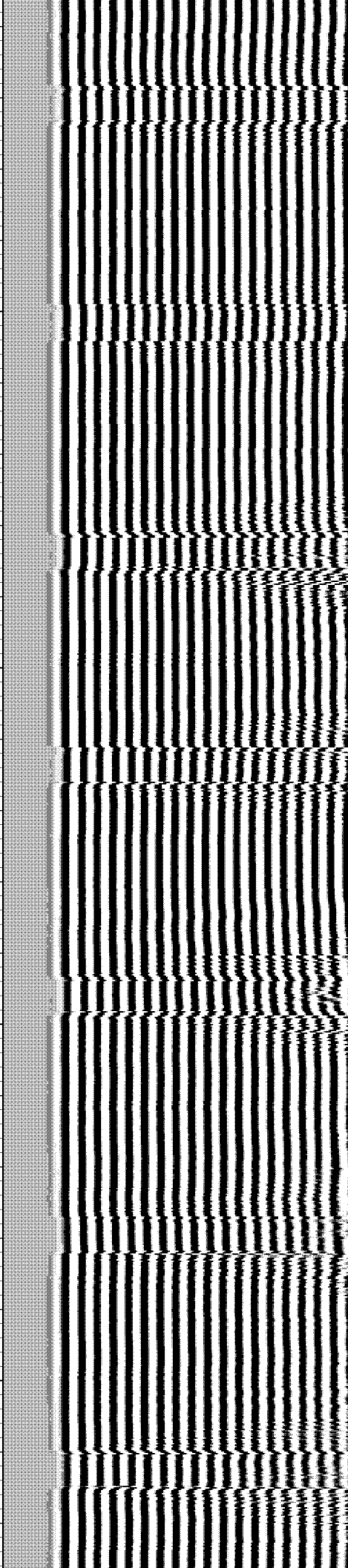
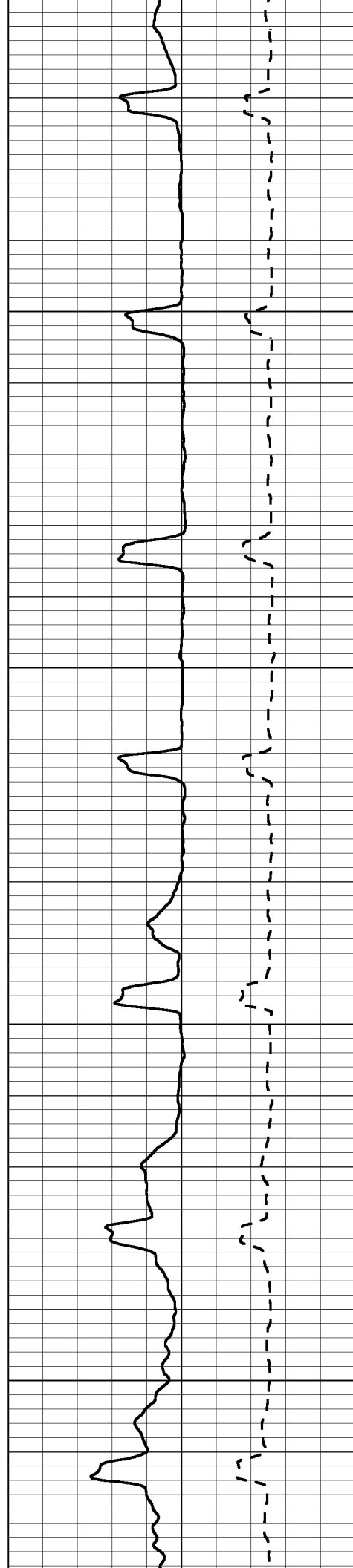


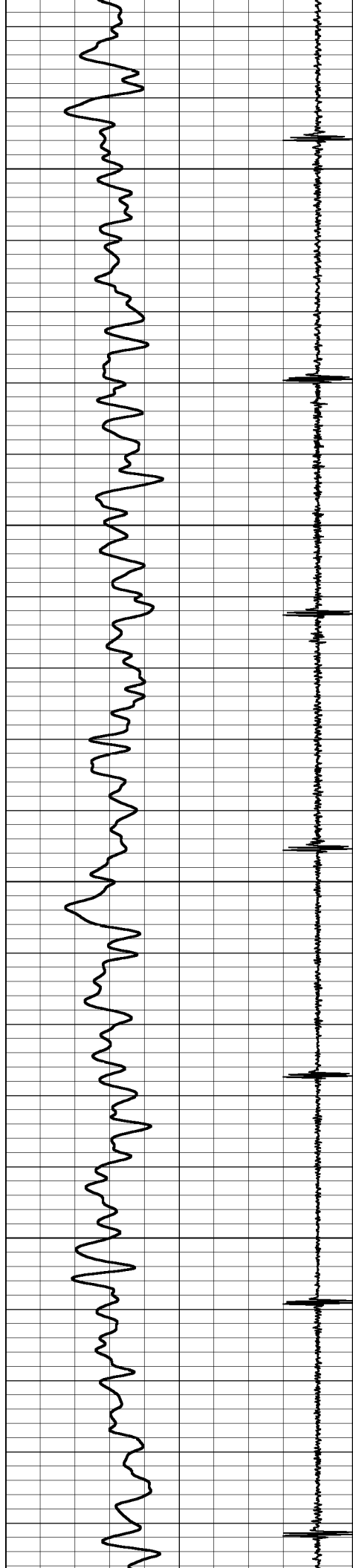
150

200

250

300



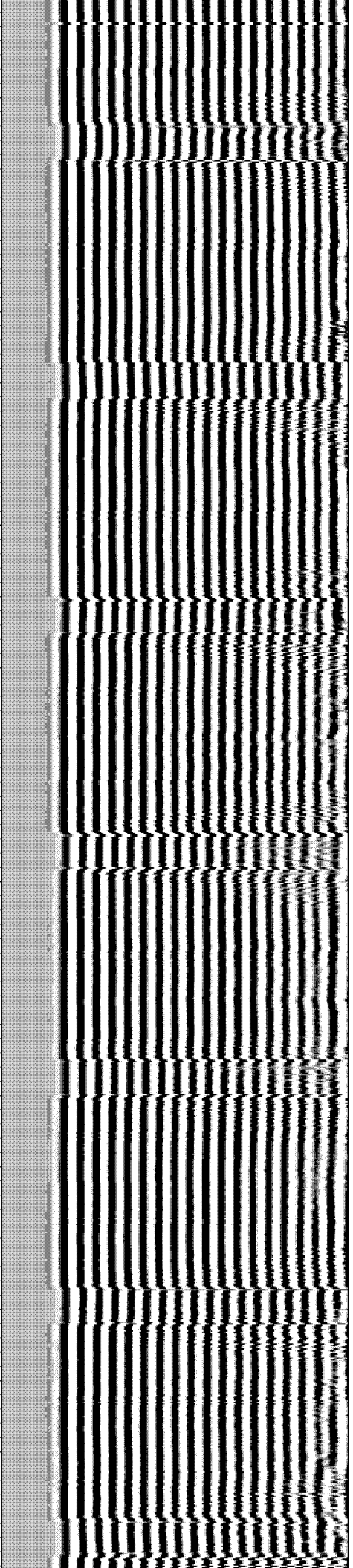
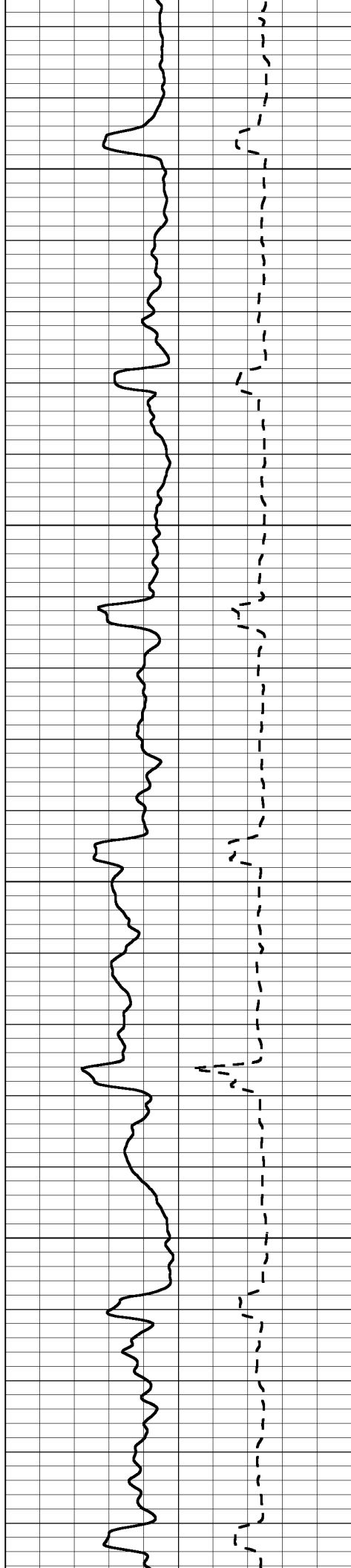


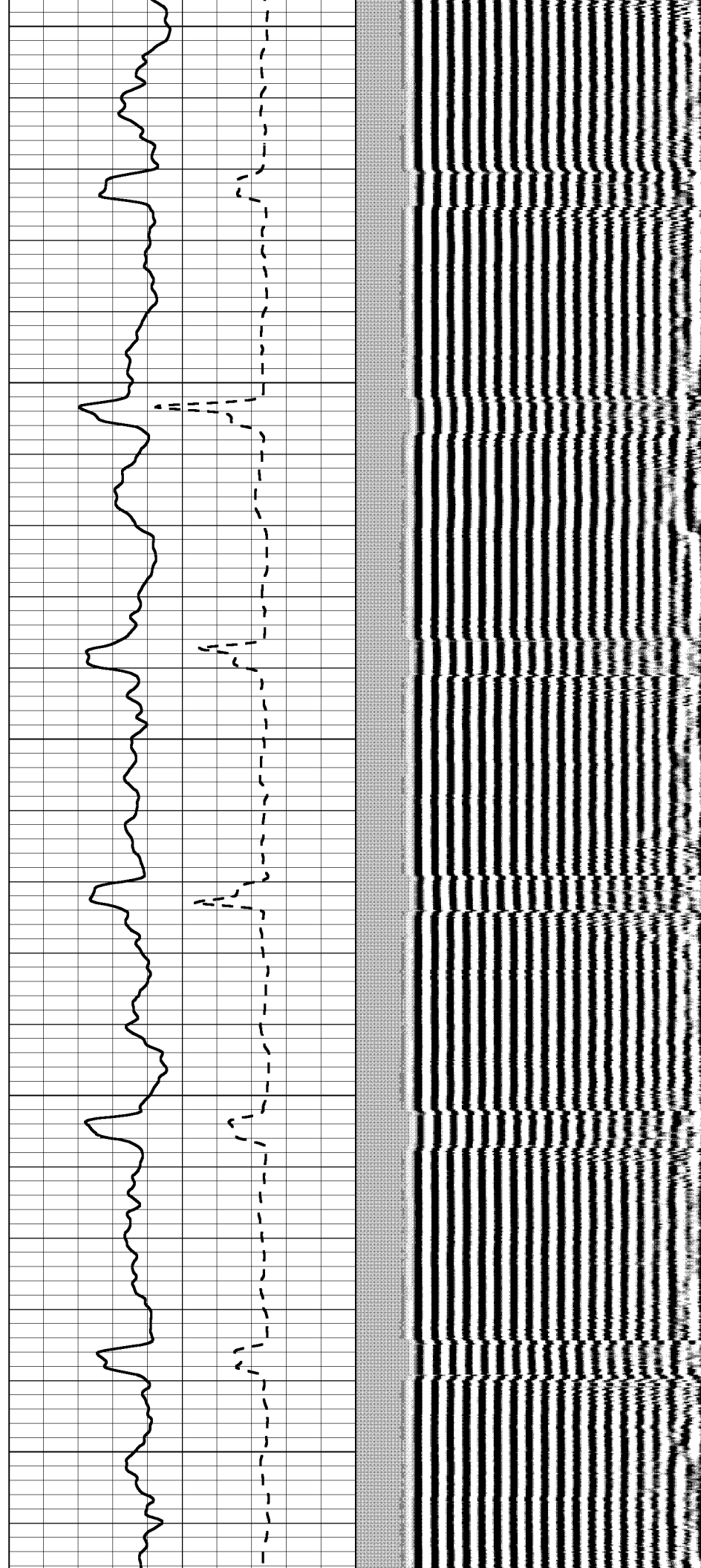
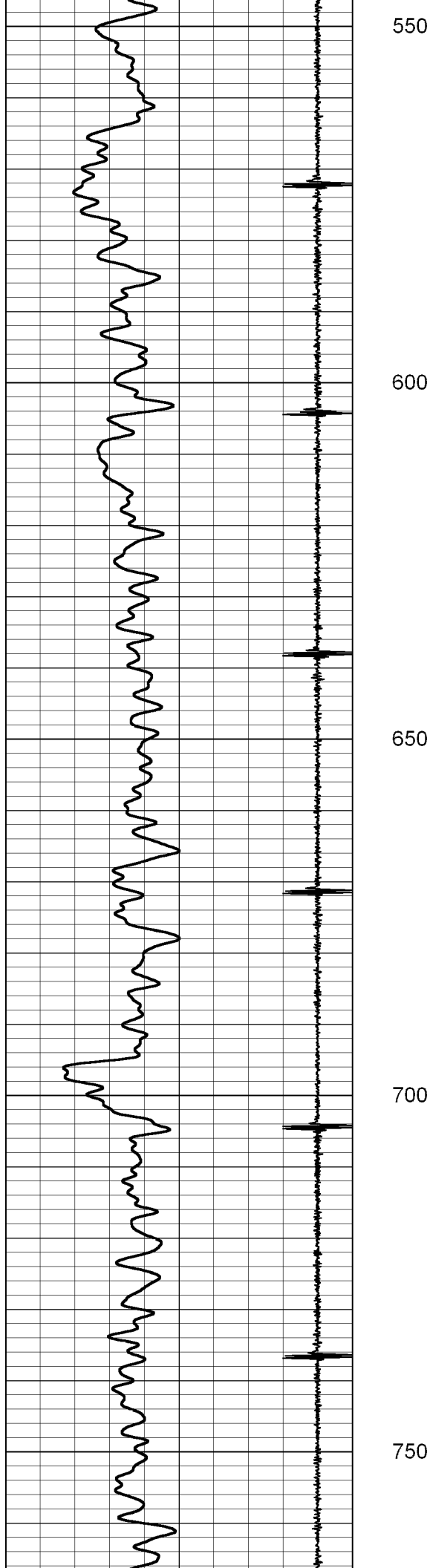
350

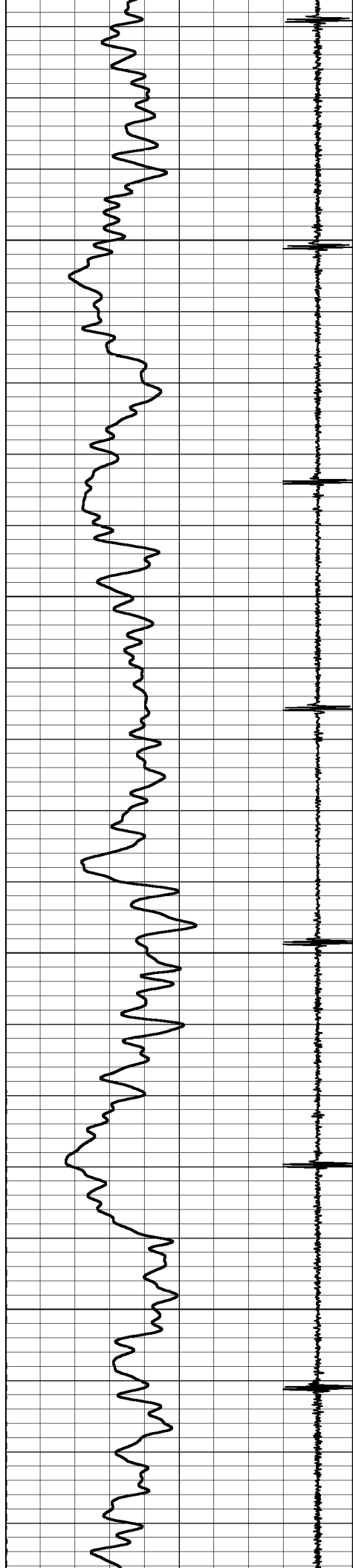
400

450

500





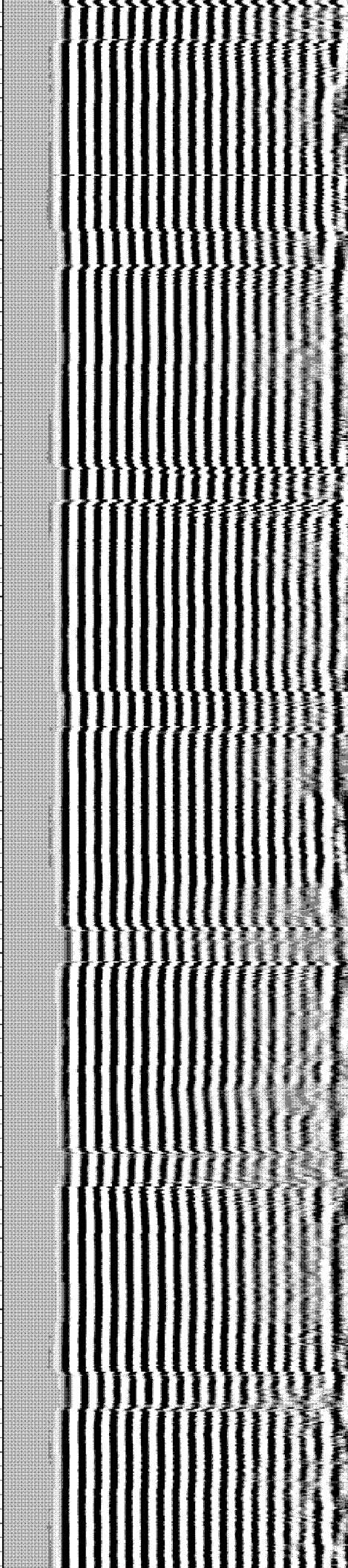
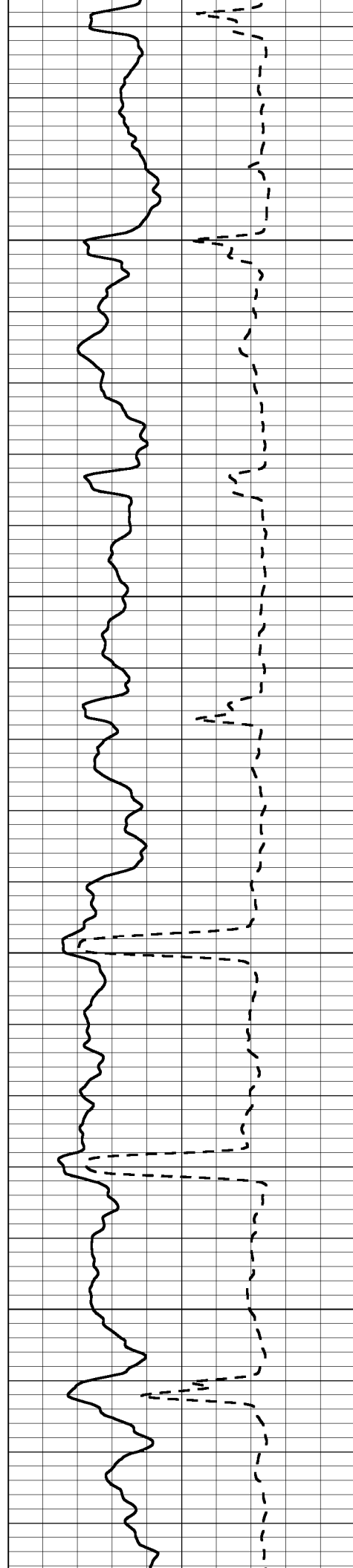


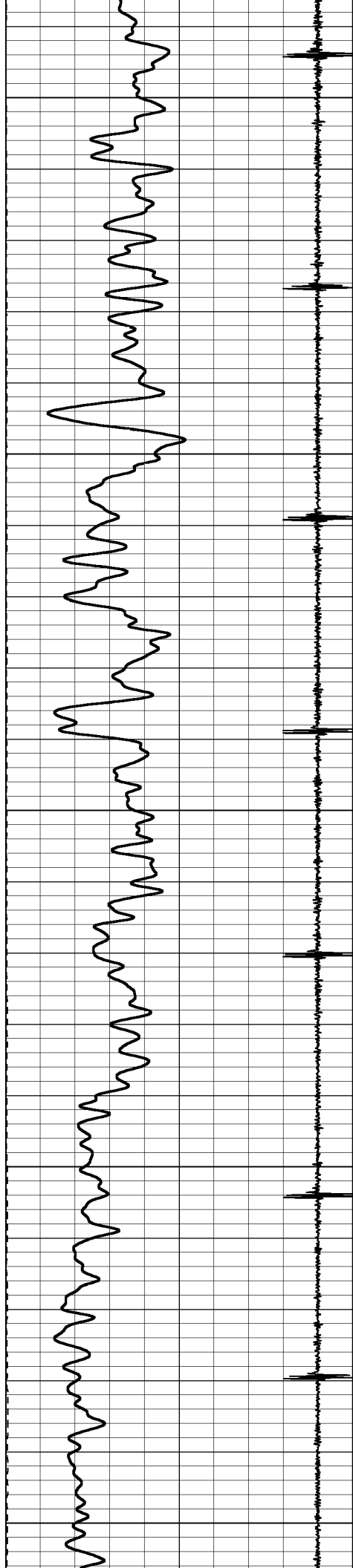
800

850

900

950





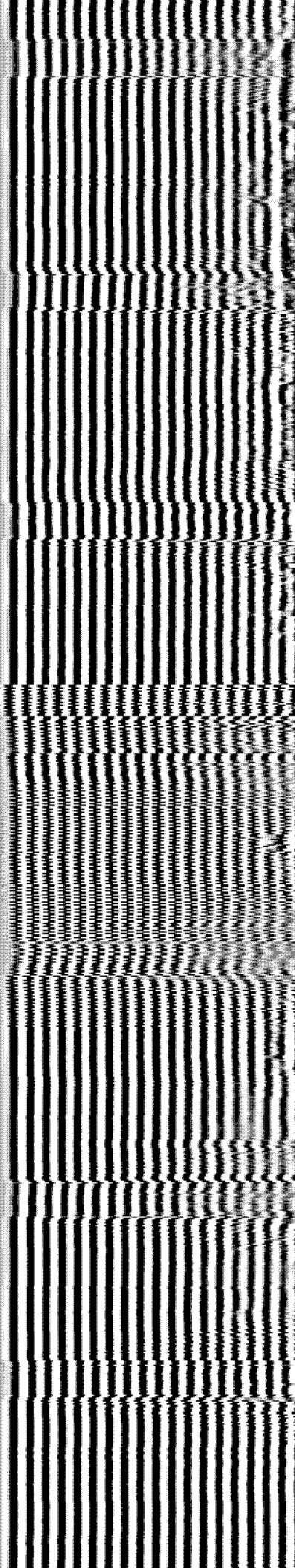
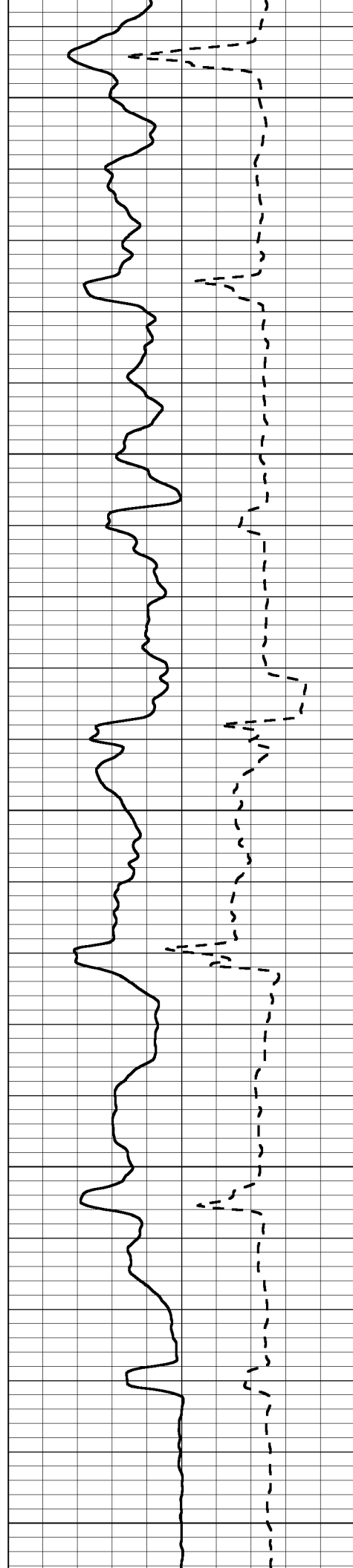
1000

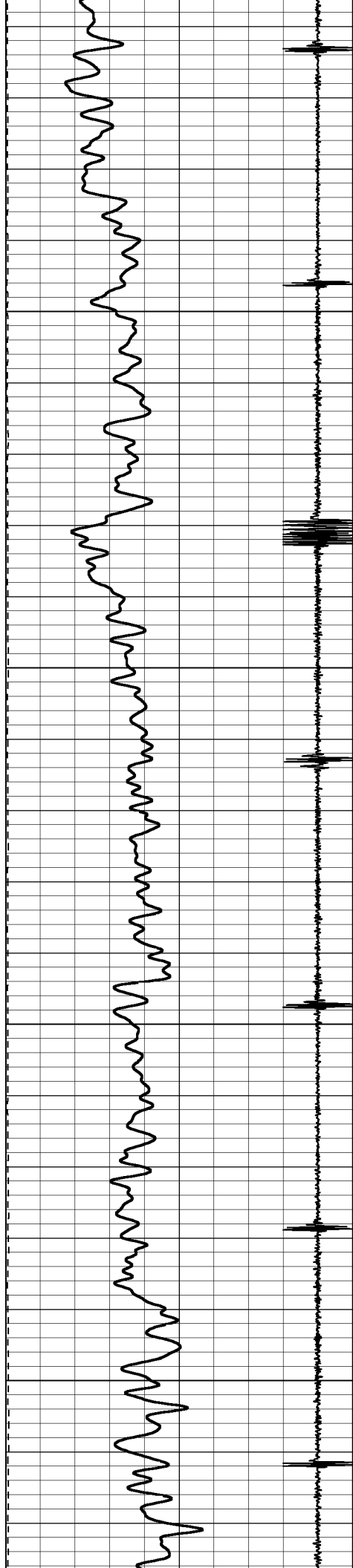
1050

1100

1150

1200



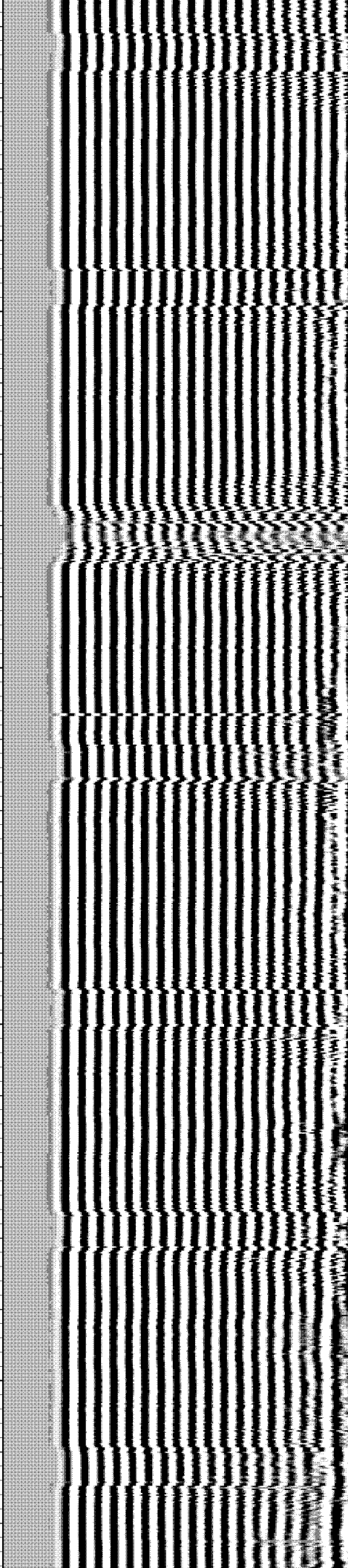
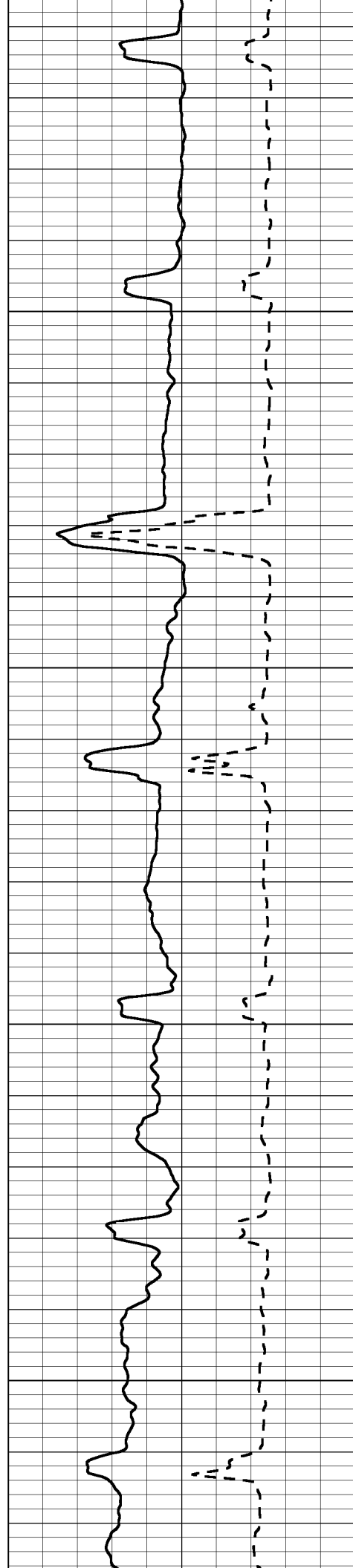


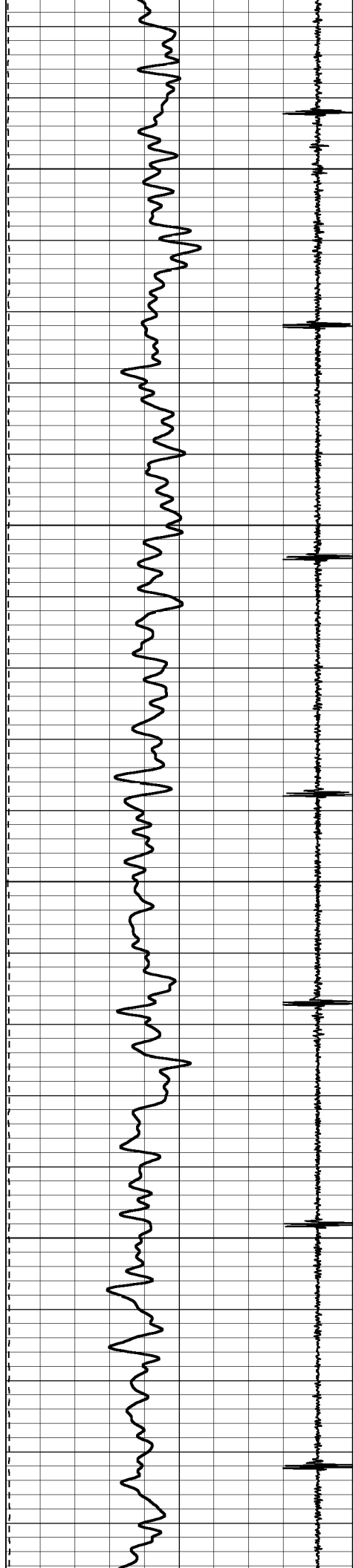
1250

1300

1350

1400



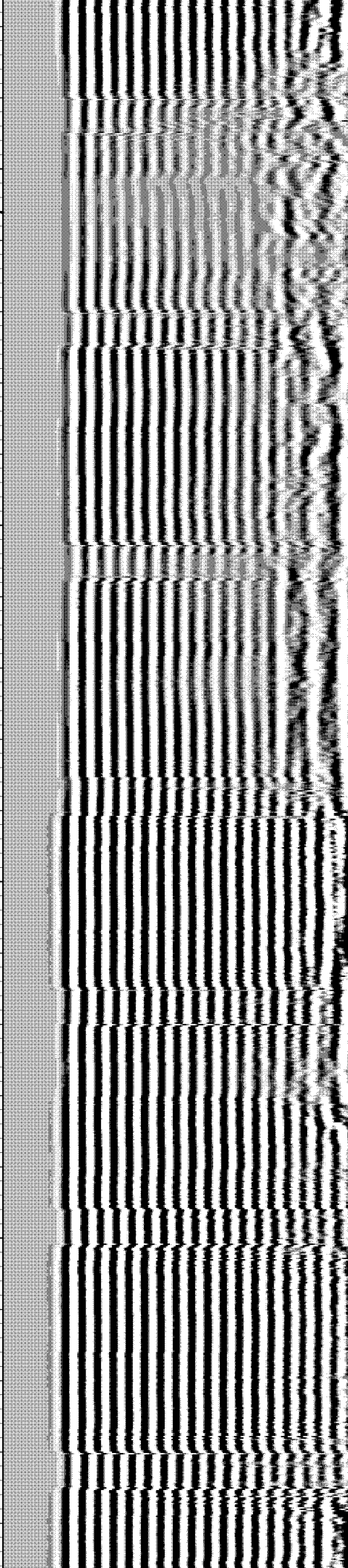
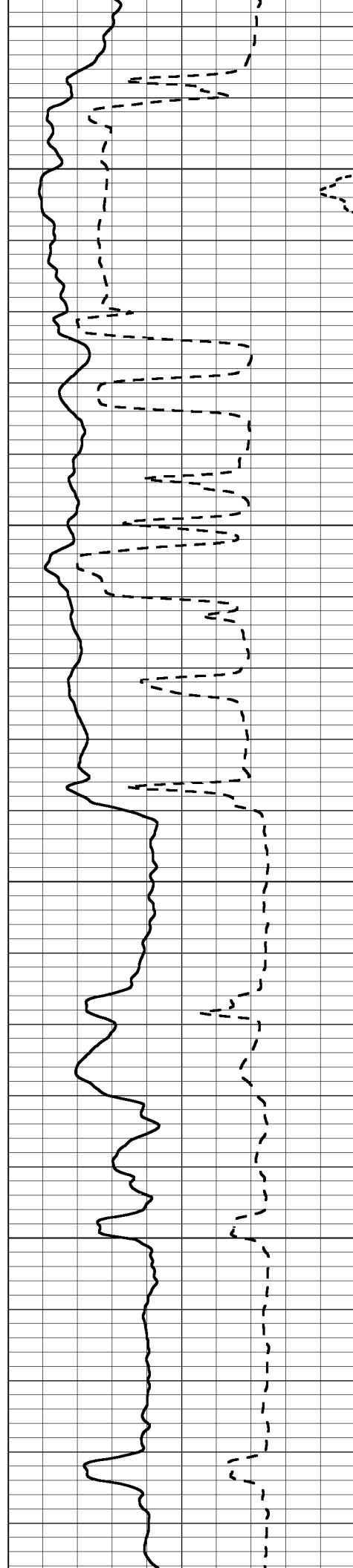


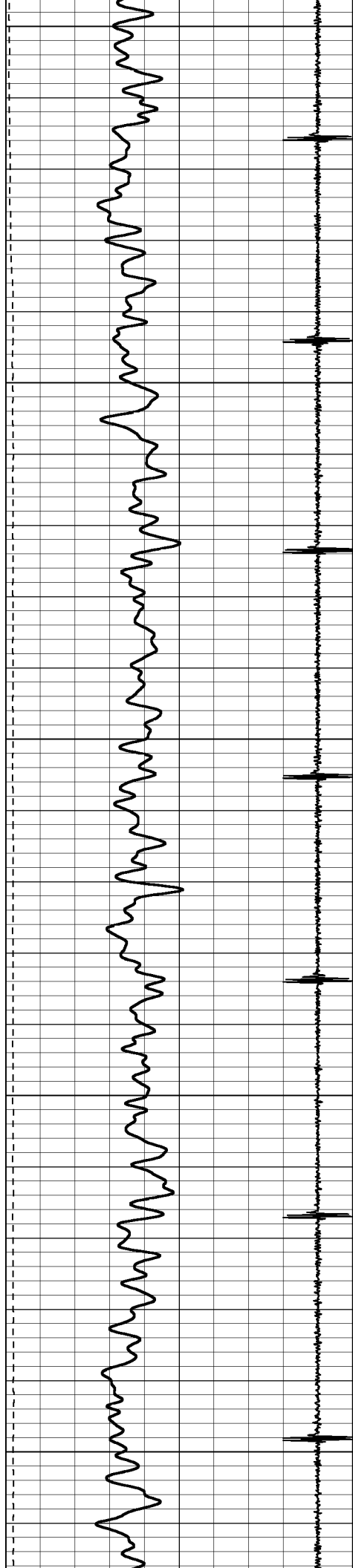
1450

1500

1550

1600





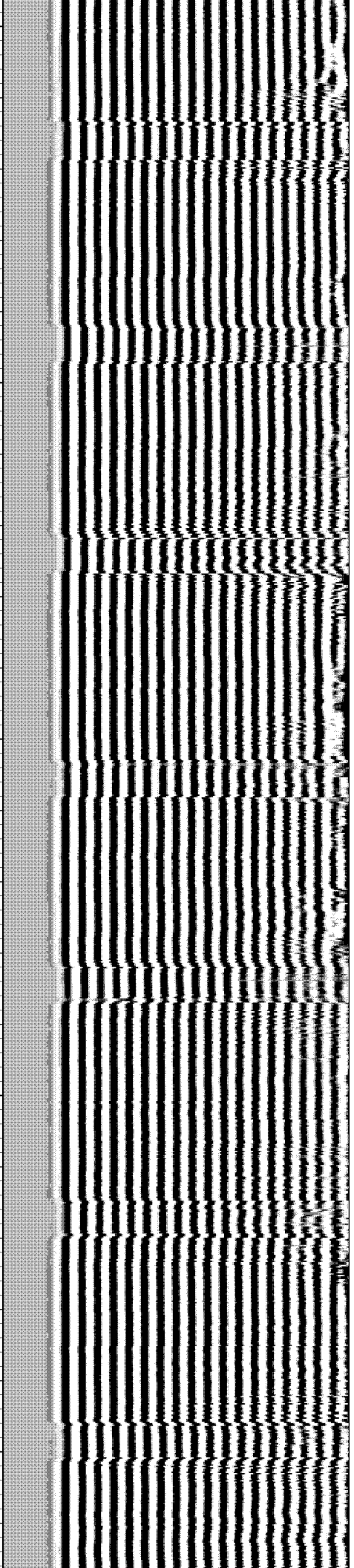
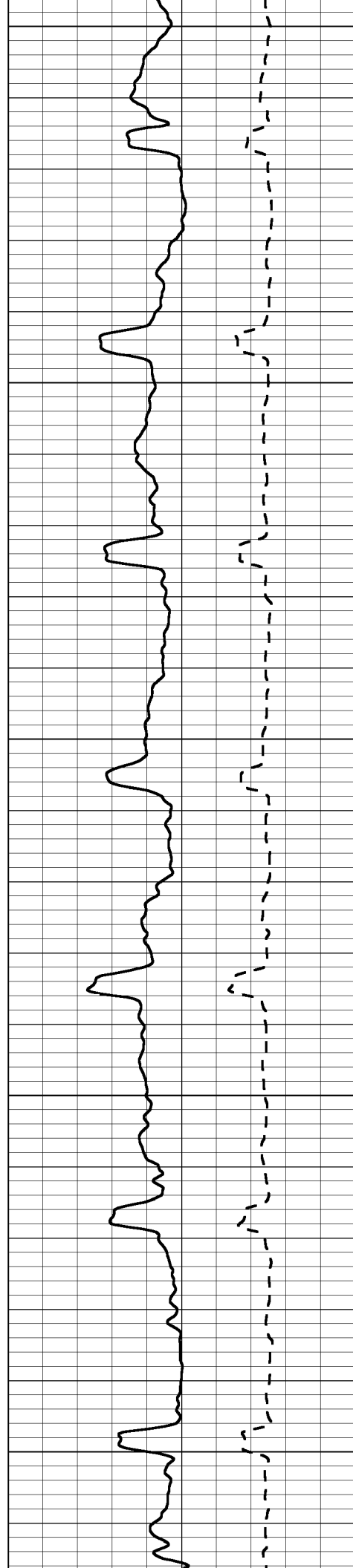
1650

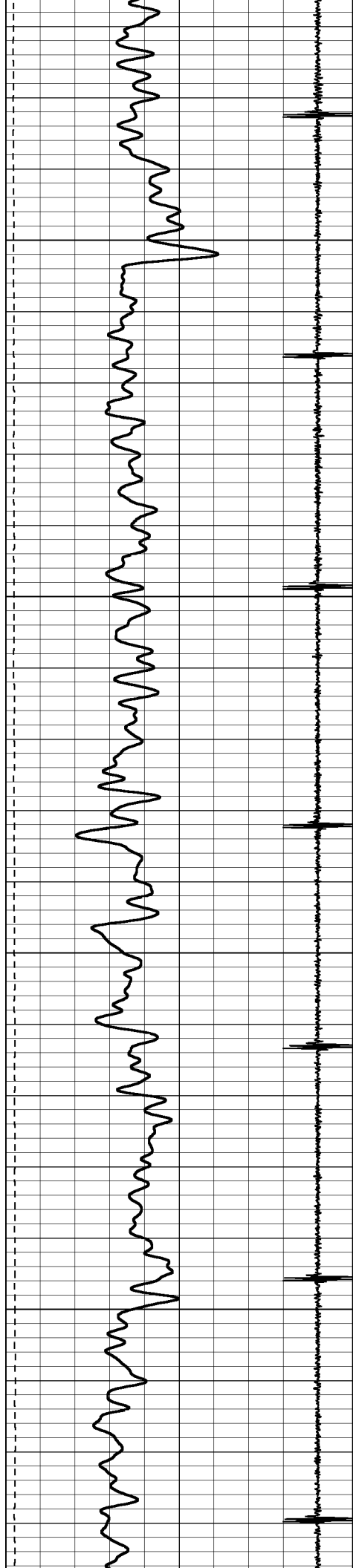
1700

1750

1800

1850



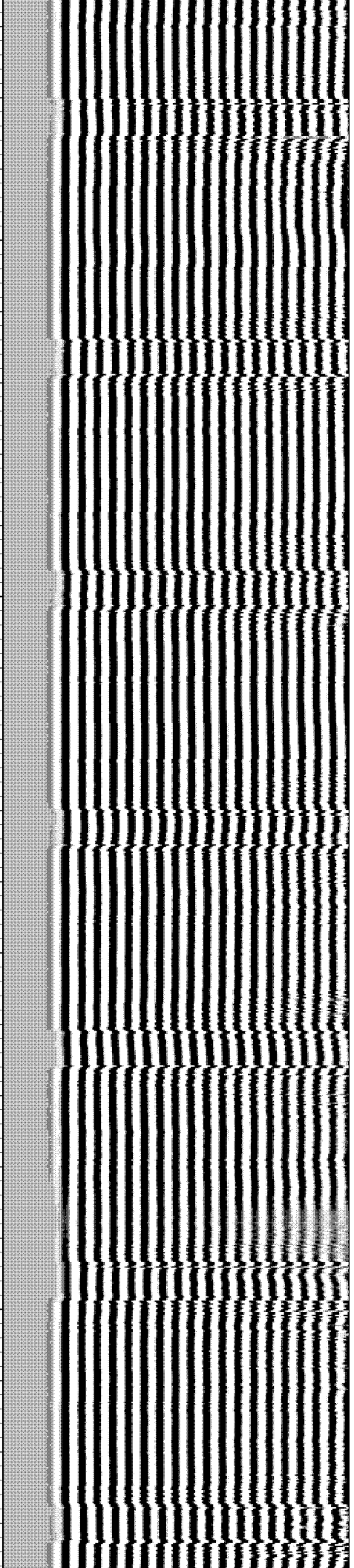
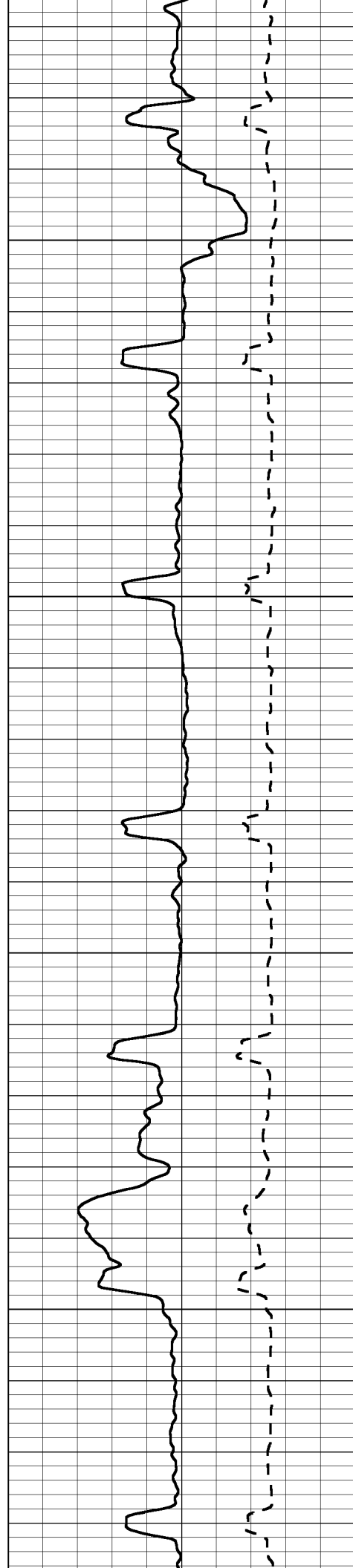


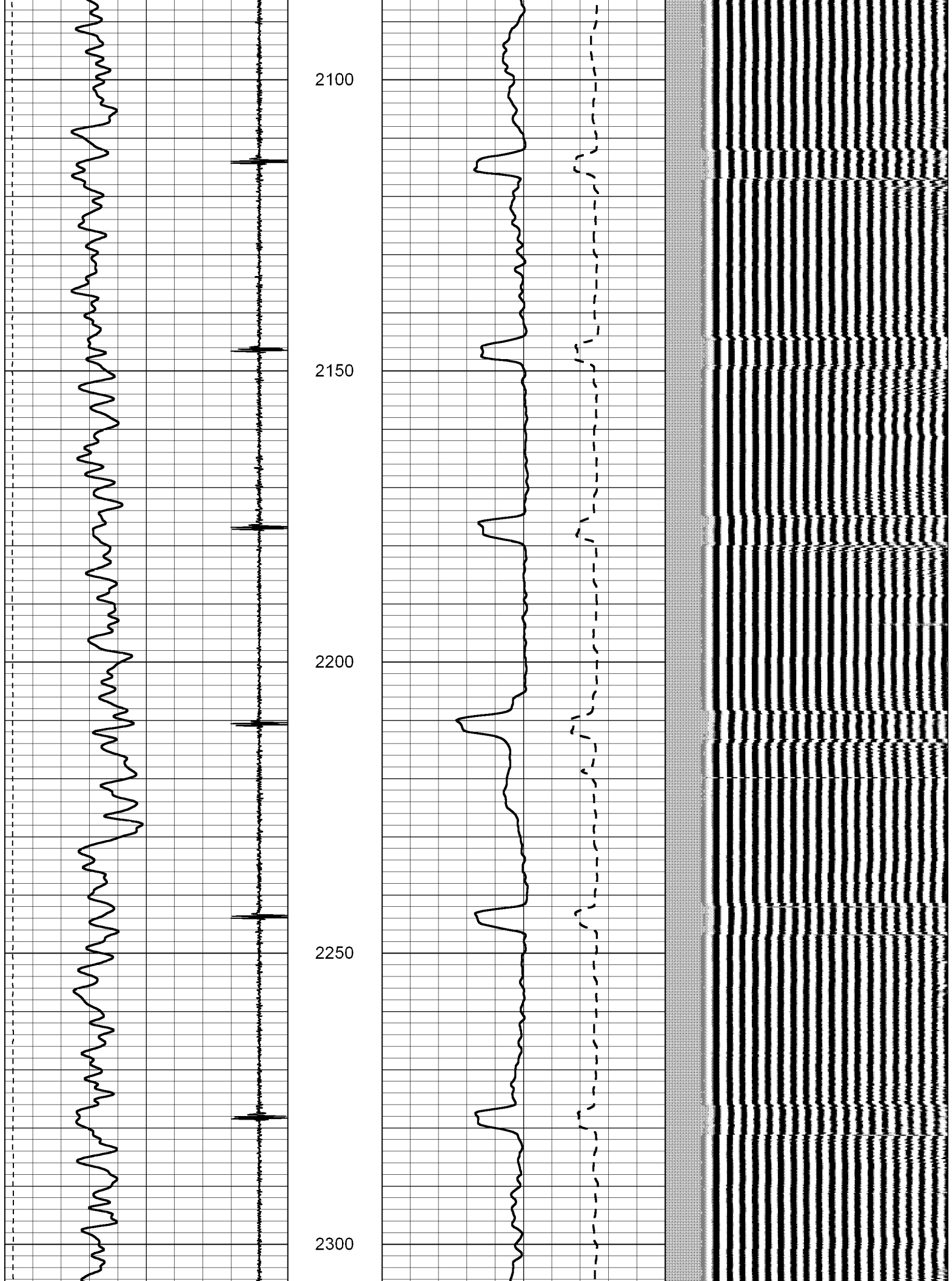
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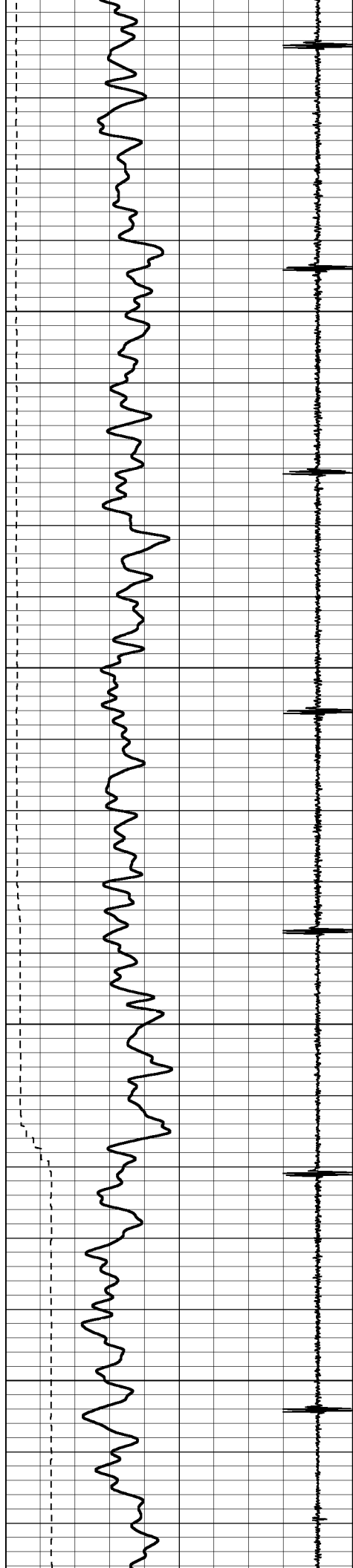
1950

2000

2050







2350

2400

2450

2500

