



PIONEER

Pioneer Energy Services

**CEMENT BOND LOG
WITH GAMMA RAY**

Company **ENTRANSO ENERGY, LLC**

Well **T.WIEBE #31-1 SWD**

Field **HAZLETT**

County **BUTLER**

State **KS**

Location: API #: 15-015-24118-00-00

120' FNL & 540' FEL
NW NE NE NE

Other Services

SEC 31 TWP 23S RGE 5E

NEU
MAST TRAILER

Permanent Datum GL Elevation 1475'

Log Measured From KB 6' Above Perm. Datum

Drilling Measured From KB Elevation K.B. 1475'
D.F. 1474'
G.L. 1469'

Comp. ENTRANSO ENERGY, LLC
Well T.WIEBE #31-1 SWD
Field HAZLETT
Co. BUTLER
State KS

Date of Service 12/17/2018

Run Number ONE

Depth Driller or PBTD 3100'

Depth Logger 2829'

Bottom Log Interval 2822'

Top Log Interval 00'

Open Hole Size 7.875"

Type Fluid WATER

Fluid Level FULL

Fluid Density N/A

Max. Recorded Temperature 102 DEG/F

Max. Wellhead Pressure 00 PSI

Wellhead Connection FLOWTEE

Estimated Cement Top 180'

Unit Number 106

Wireline Size .288

Location HAYS, KS

Recorded By K.PFANNENSTIEL

Witnessed By R.GILBERT

Size Wt/Ft Top Bottom

Tubing Record 8.625" 23# 00' 214'

Surface Casing 5.5" 15.5 # 00' TD

Production Casing

Liner Record

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
NEWTON KS
1ST STREET EAST TO PURITY SPRINGS RD
2 SOUTH, WEST TO WEST SIDE OF TANKS SOUTH INTO

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew

Engineer: K.PFANNENSTIEL
Operator: M.HISS
Operator:
Operator:

Tool Data - Services

080554

Serial Number

Log Variables

DatabaseC:\ProgramData\Warrior\Data\entransco_t_wiebe#31_1swd_cbl_grn.db
Dataset field/well/cbl1/pass4/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 101	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 15.5	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.08
NPORSEL Limestone	NPORSHIFT 0	PERFS 0	PPT usec 0	SRFTEMP degF 57	TDEPTH ft 2600		

Variable Description

BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude
MINAMPL : Minimum Amplitude

MINATTN : Minimum Attenuation
NPORSEL : Neutron Porosity Curve Select
NPORSHIFT : NPORSHIFT
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			PROBE-RBT-DIGITAL-RBL-D (080554) Probe 2 3/4" Radii Bond-Digital	8.75	2.75	100.00
WVFS8	16.36					
WVFS7	16.36					
WVFS6	16.36					
WVFS5	16.36					
WVFS4	16.36					
WVFS3	16.36					
WVFS2	16.36					
WVFS1	16.36					
WVFCAL	16.36					
WVF3FT	16.36					
WVF5FT	15.36					
HEADVOLT	12.17		Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	8.39					

GR	7.05		GR_CCL-2 3/4" Probe (111032)	4.54	2.75	50.00
NEU	1.08		NEU-PRNEU (ProbeNEU1)	4.75	1.88	
Dataset: entransco_t_wiebe#31_1swd_cbl_grn.db: field/well/cbl1/pass4 Total length: 24.83 ft Total weight: 182.00 lb O.D.: 2.75 in						

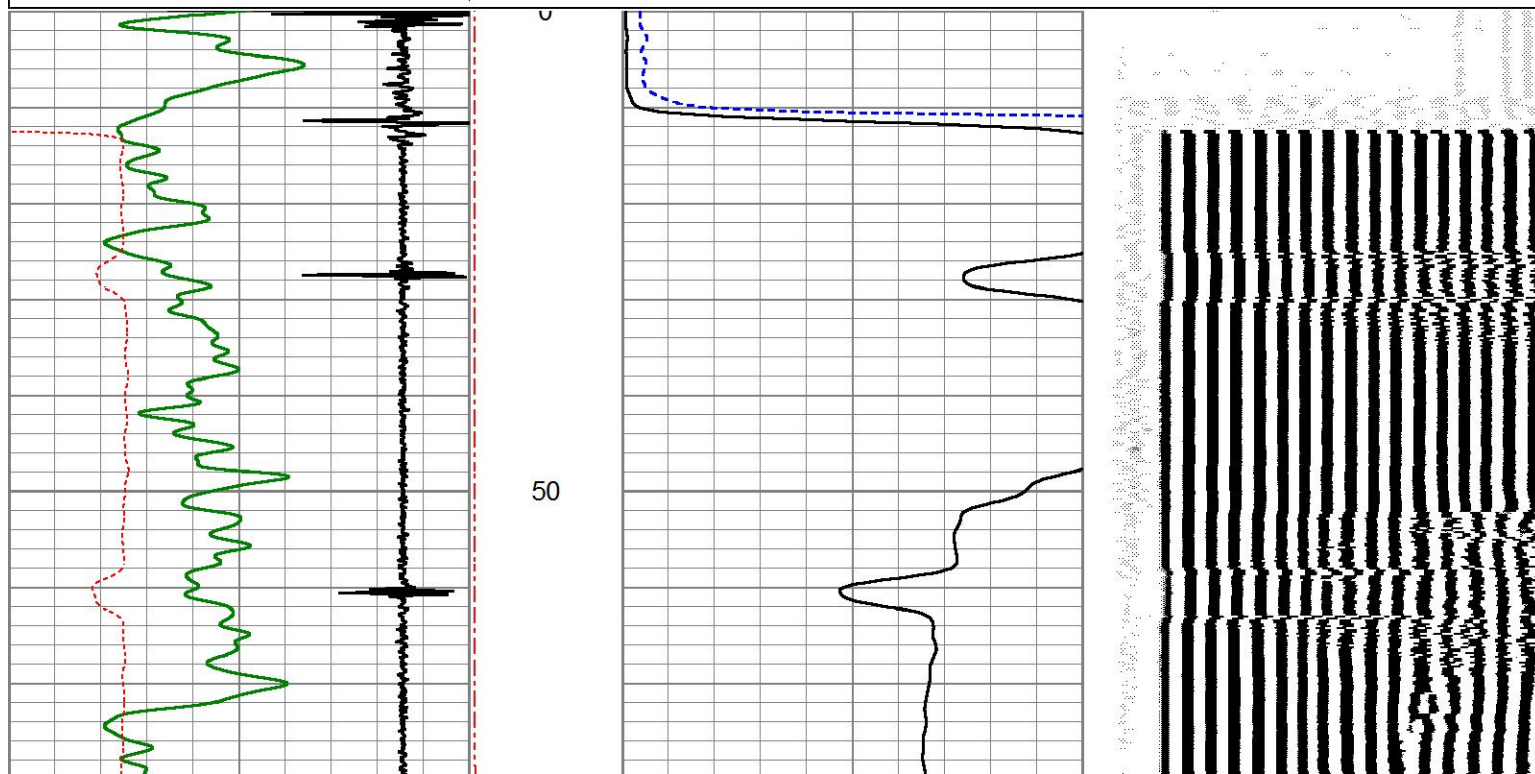


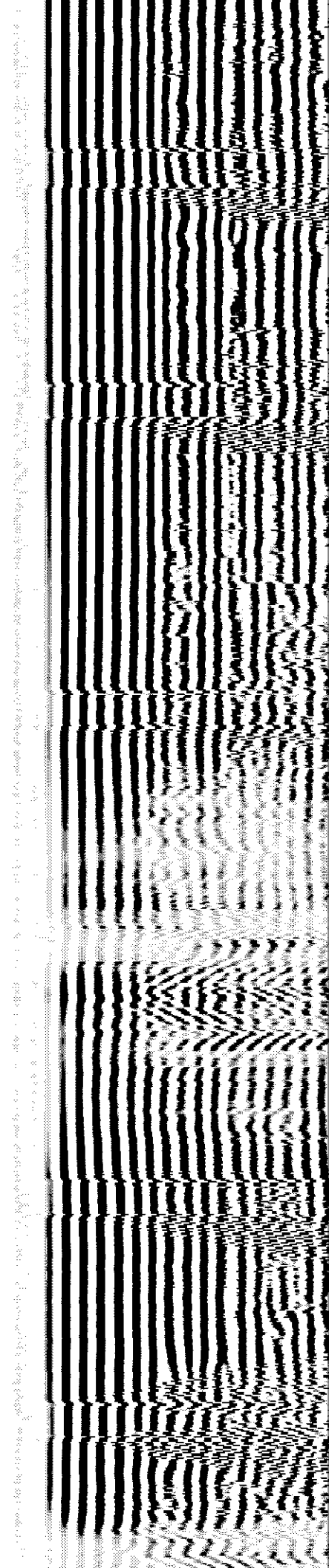
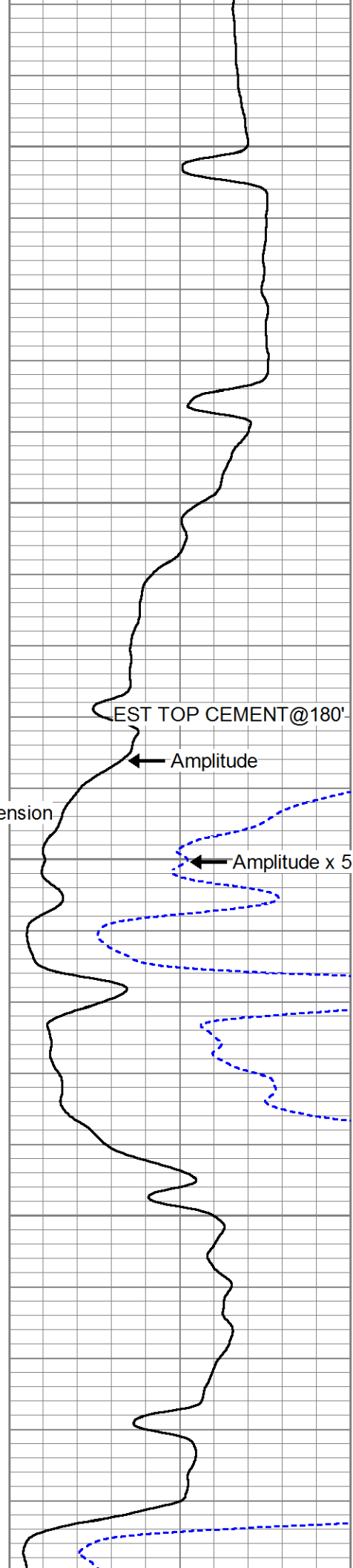
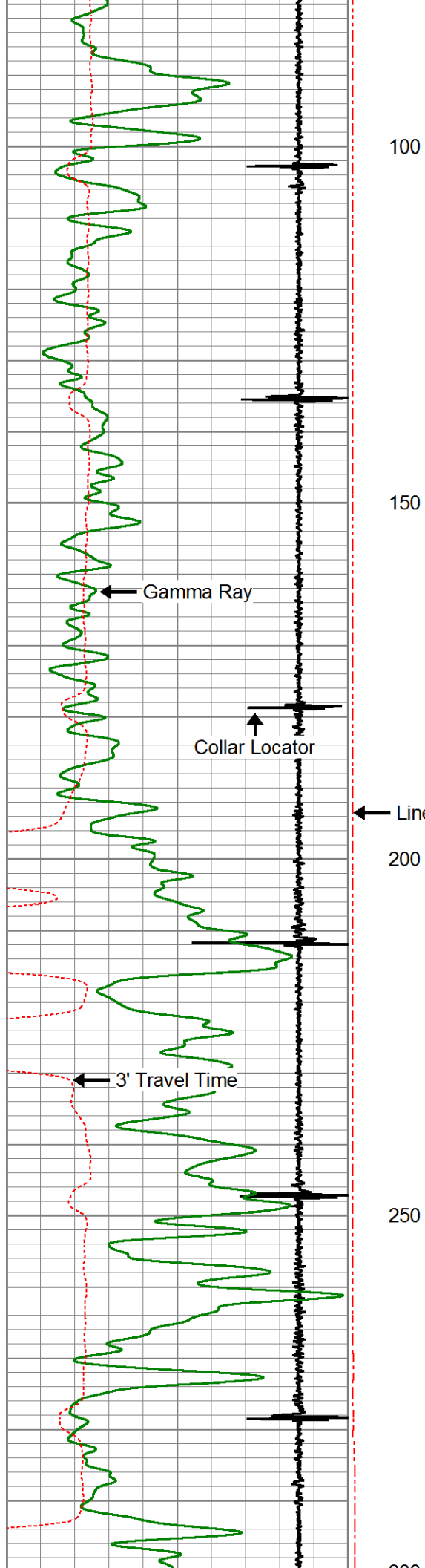
MAIN LOG

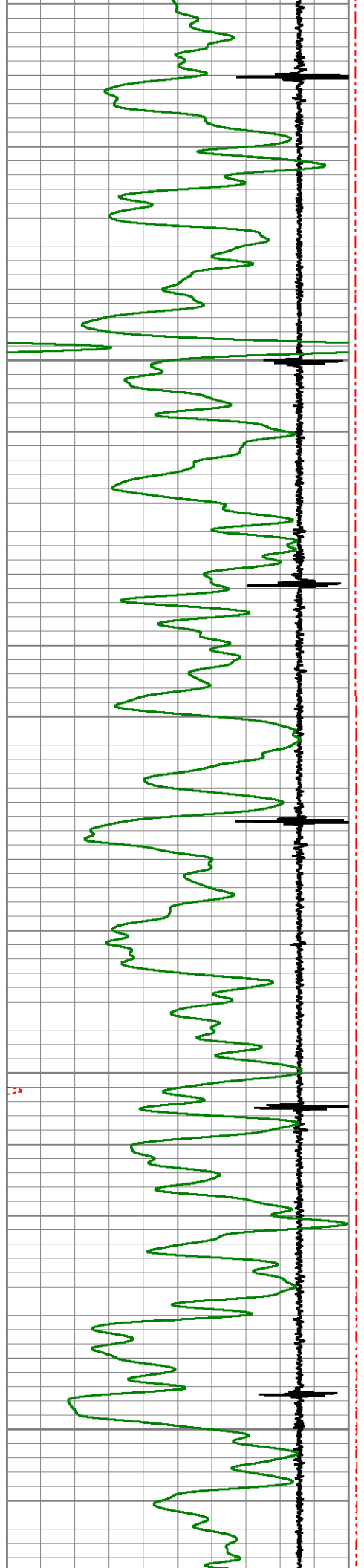
ZERO PSI APPLIED AT SURFACE

Database File	entransco_t_wiebe#31_1swd_cbl_grn.db
Dataset Pathname	cbl1/pass4
Presentation Format	pinr_cbl
Dataset Creation	Mon Dec 17 17:00:28 2018
Charted by	Depth in Feet scaled 1:240

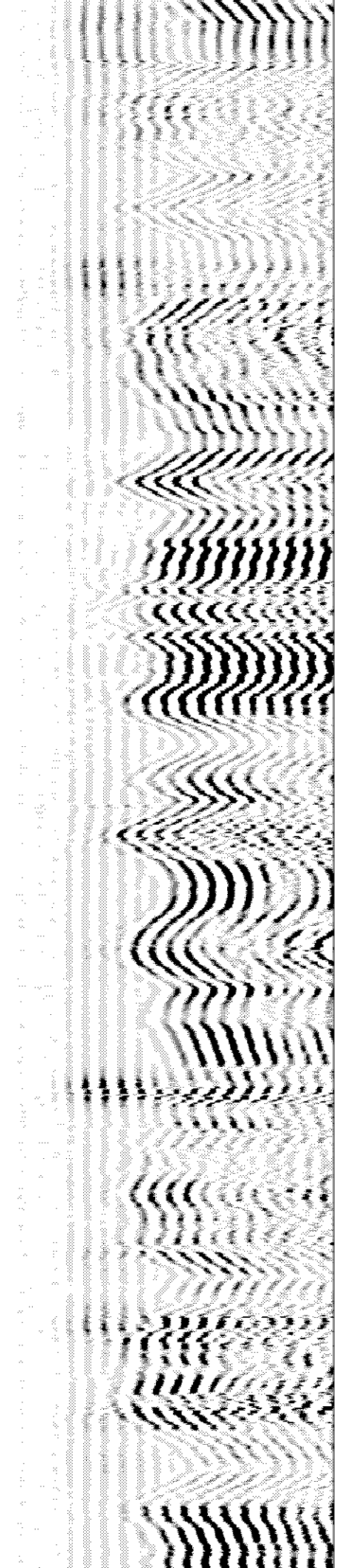
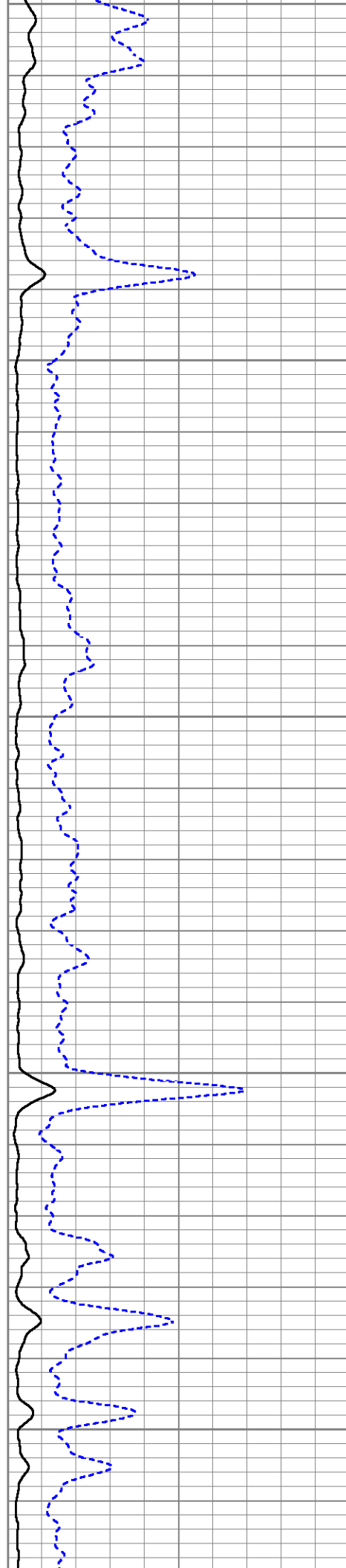
-6	Collar Locator	1	Line Tension	0	Amplitude (mV)	100	200	Variable Density (usec)	1200
0	Gamma Ray	150	0 (lb2000)						
280	3' Travel Time (usec)	180							

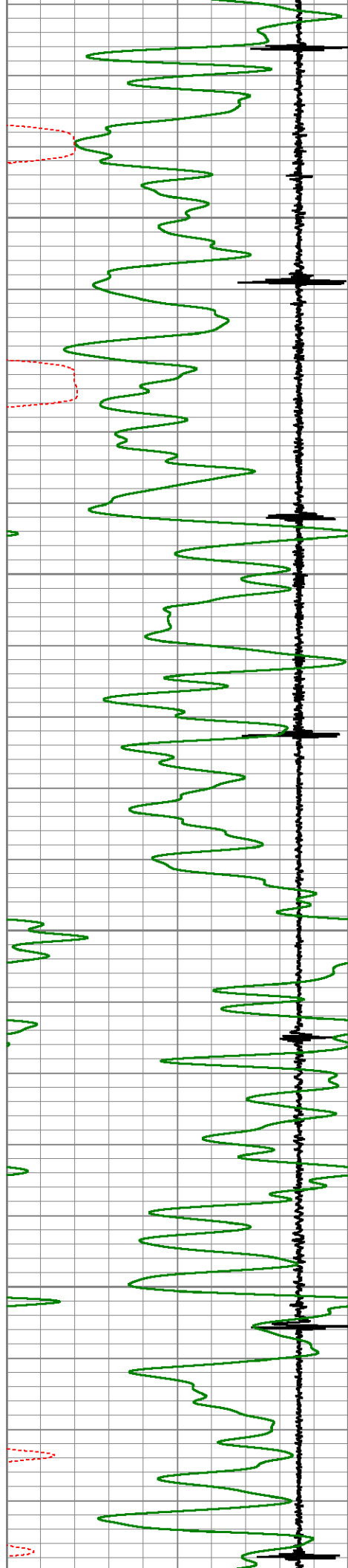






300
350
400
450
500



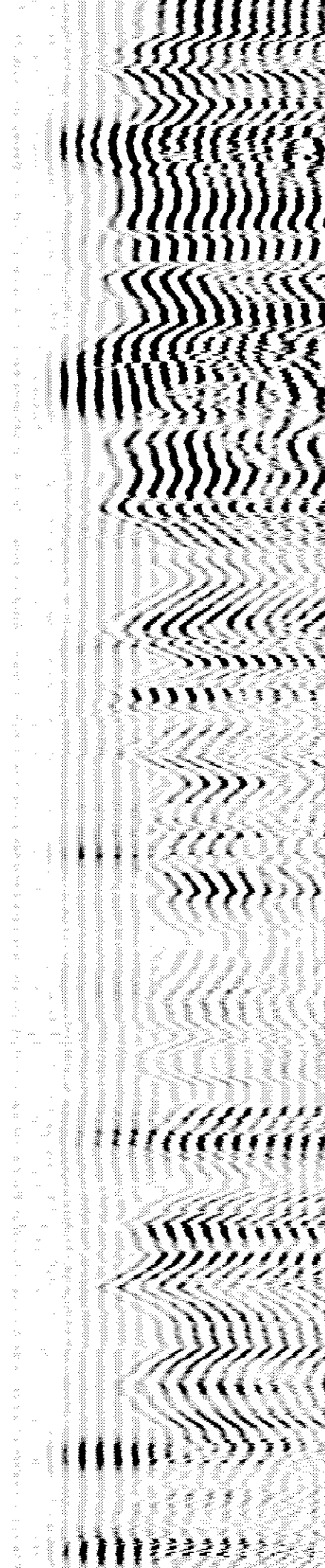
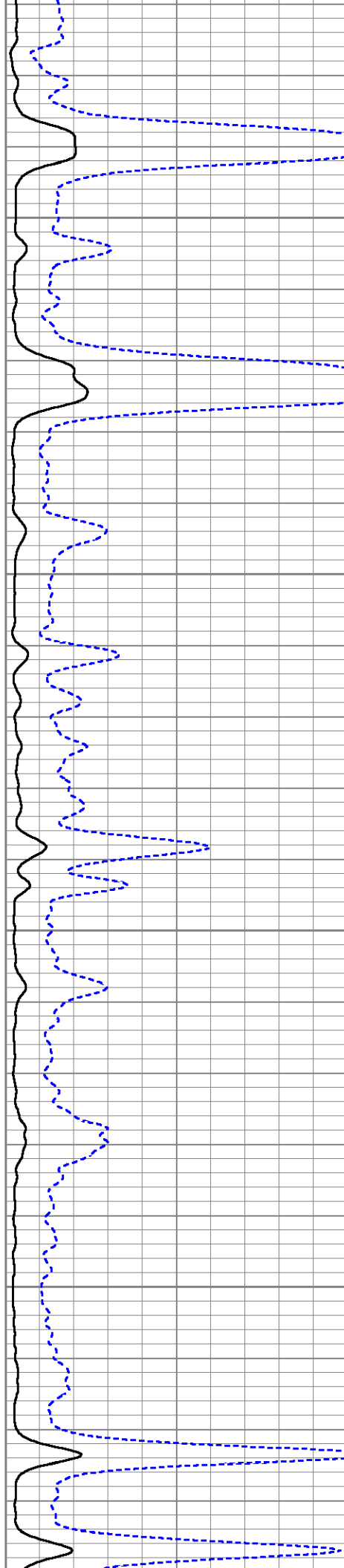


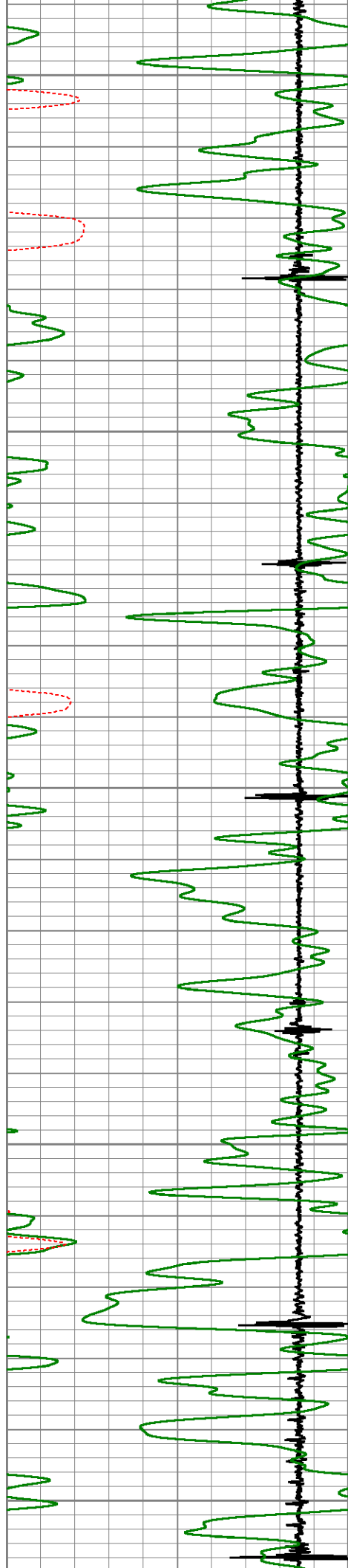
550

600

650

700





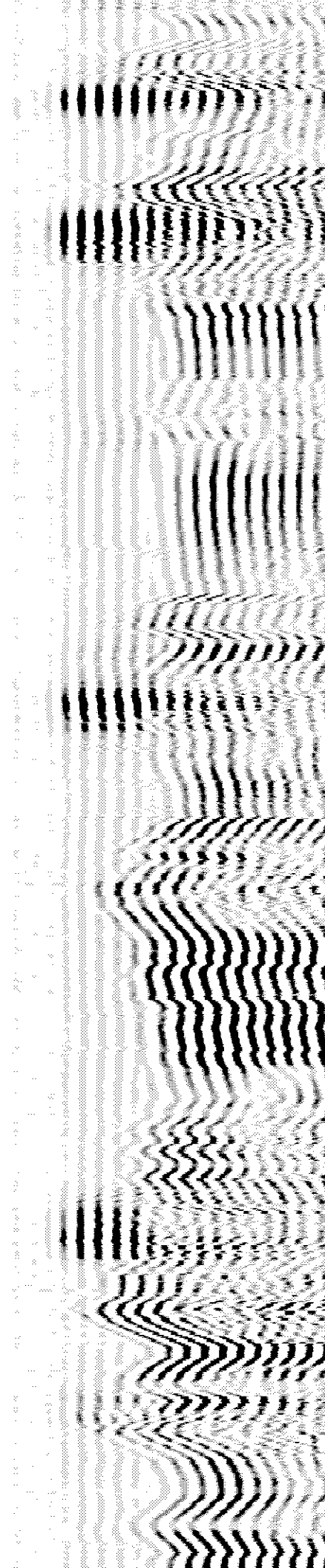
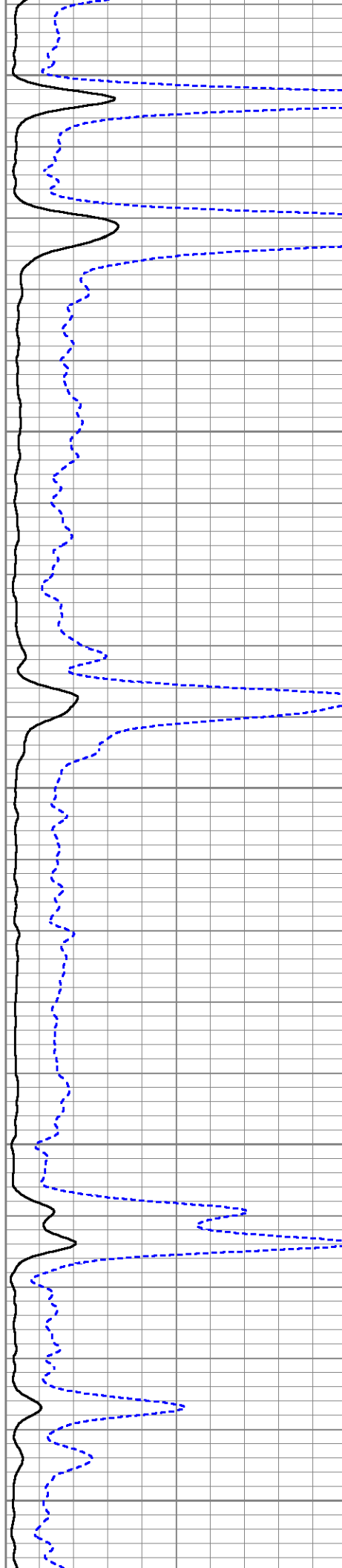
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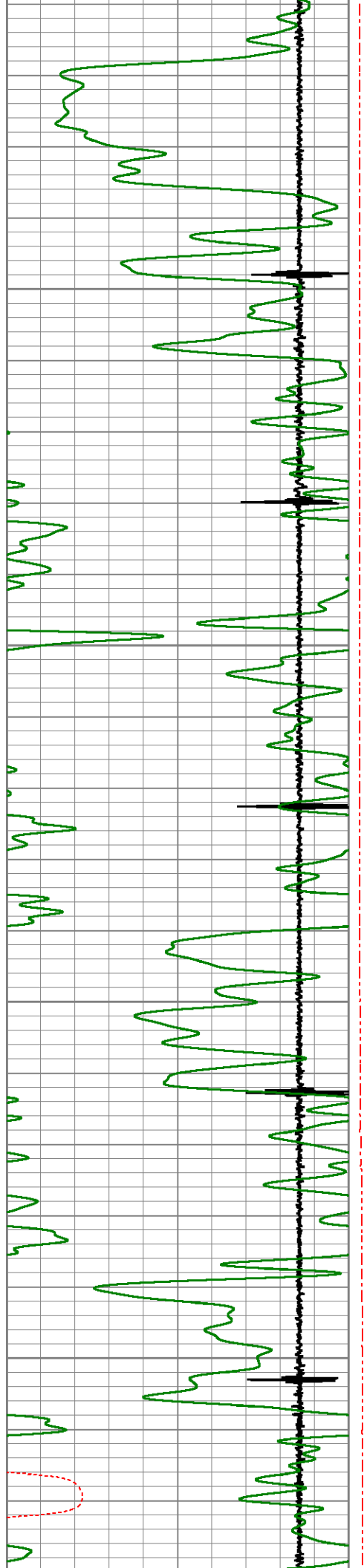
800

850

900

950



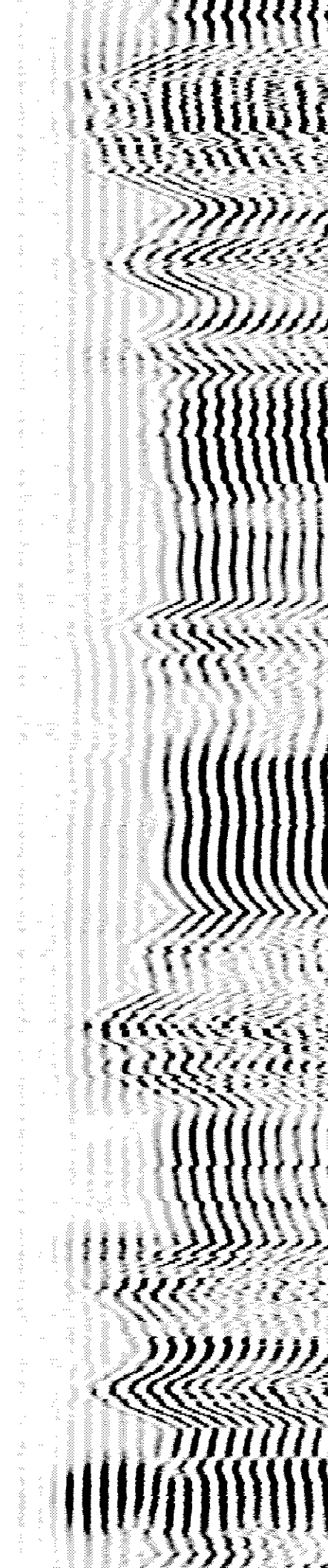
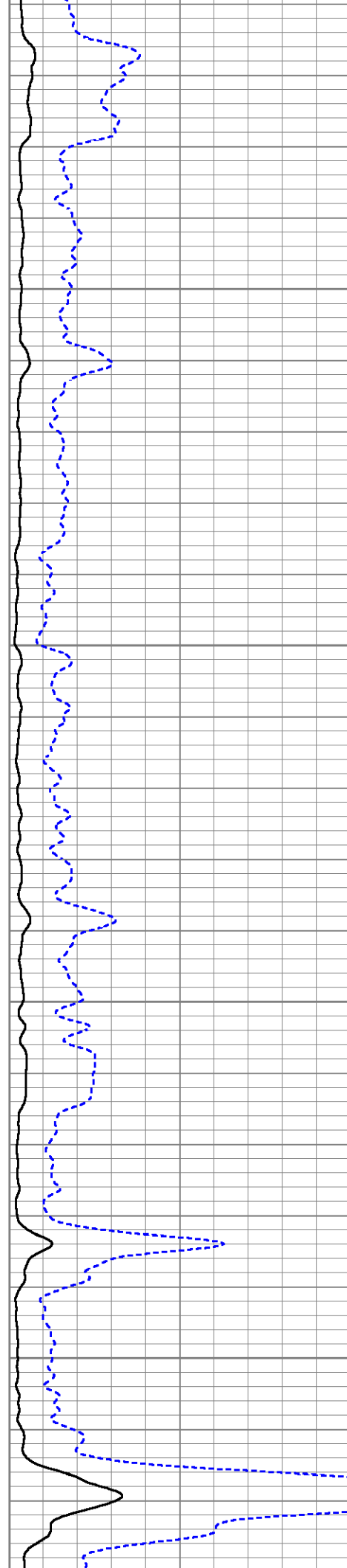


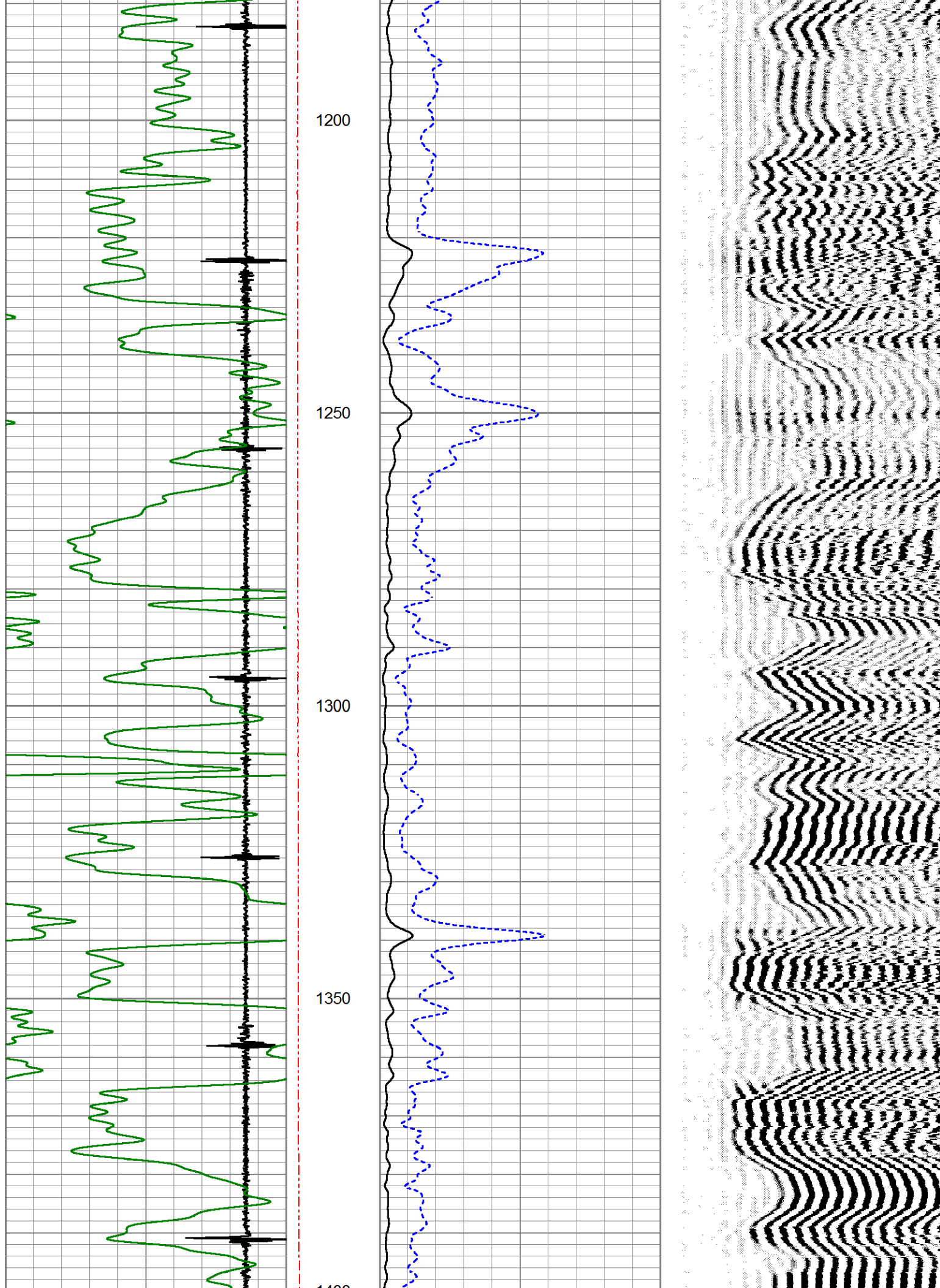
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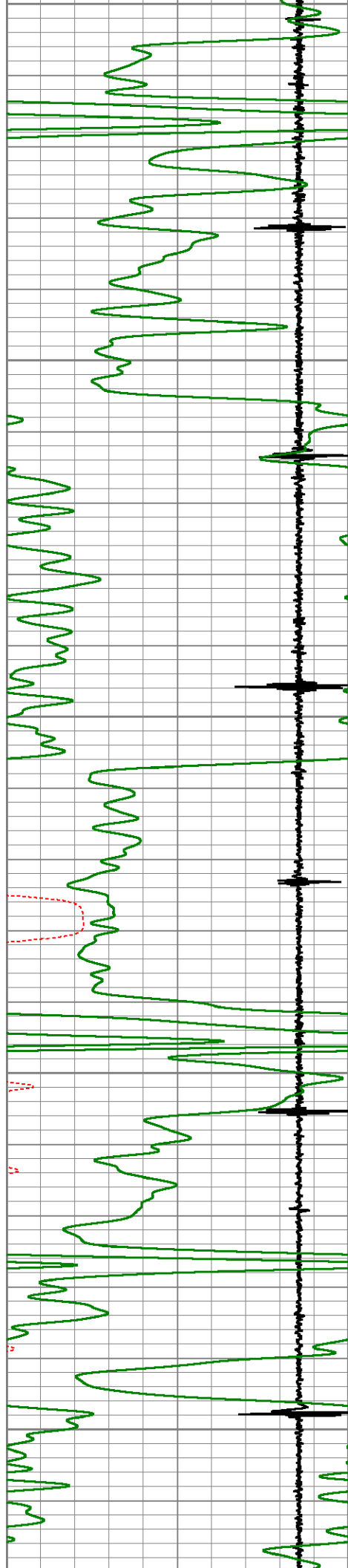
1050

1100

1150







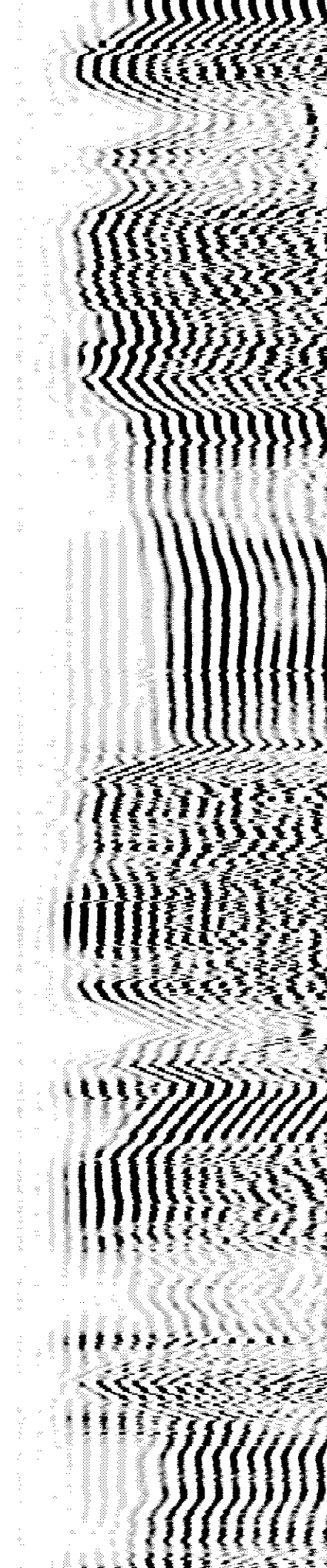
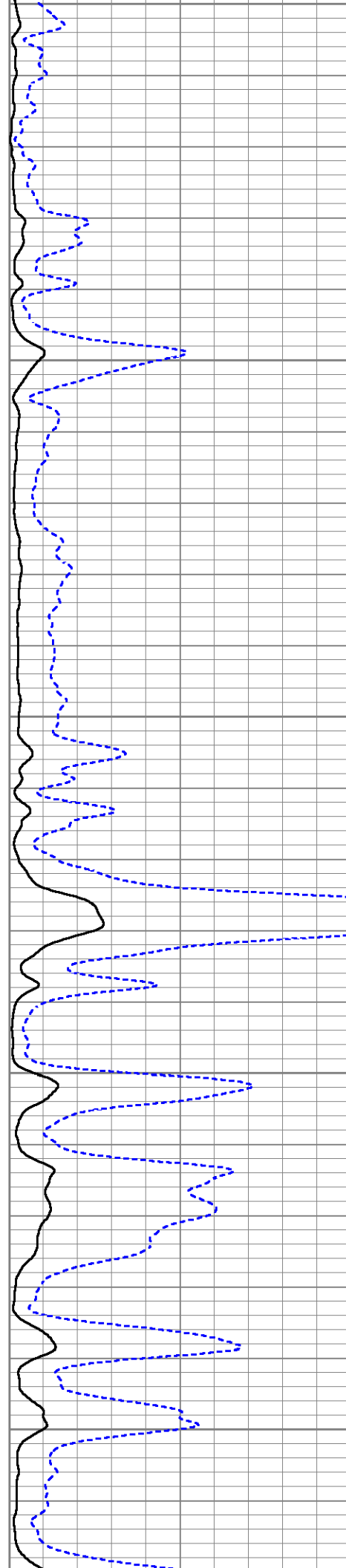
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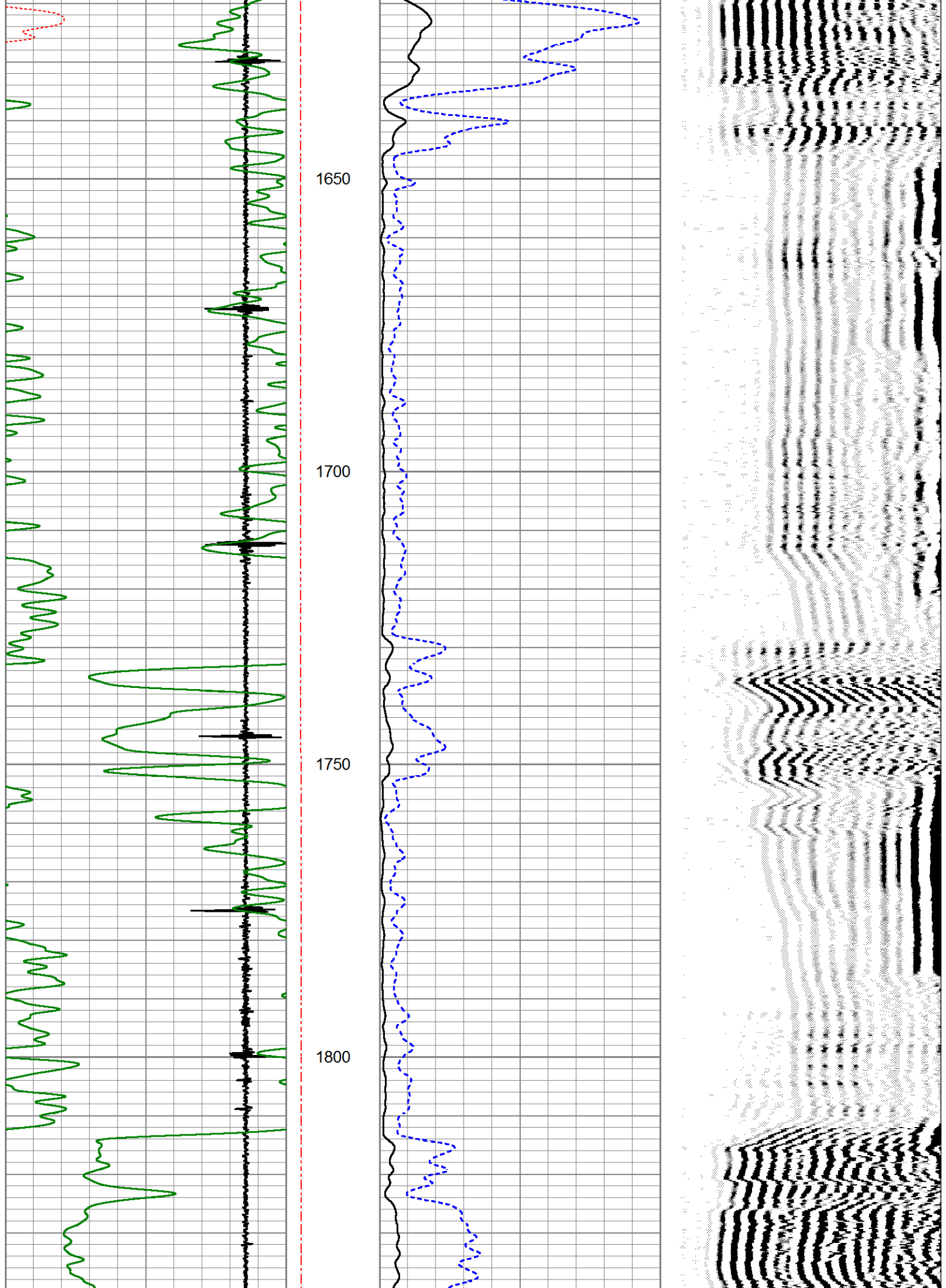
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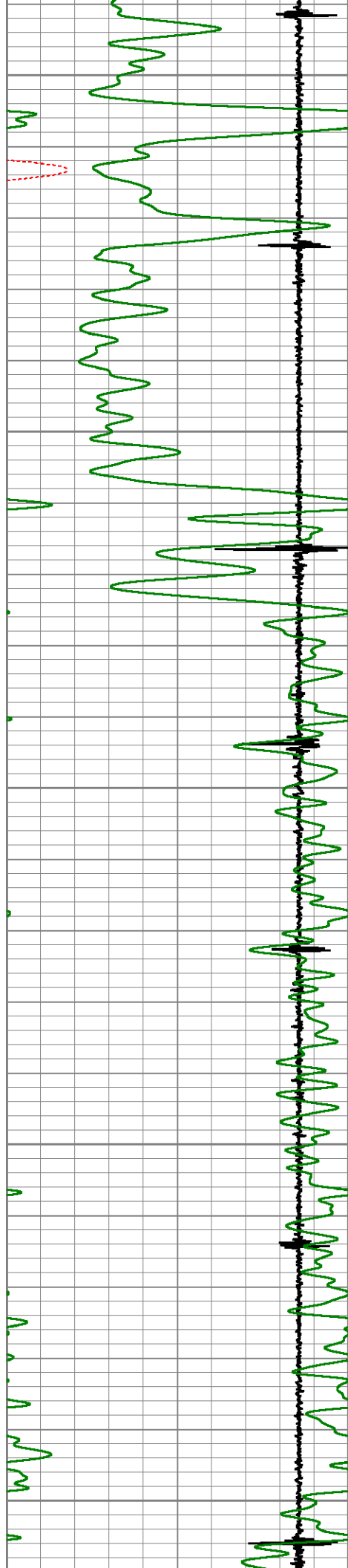
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1550

1600







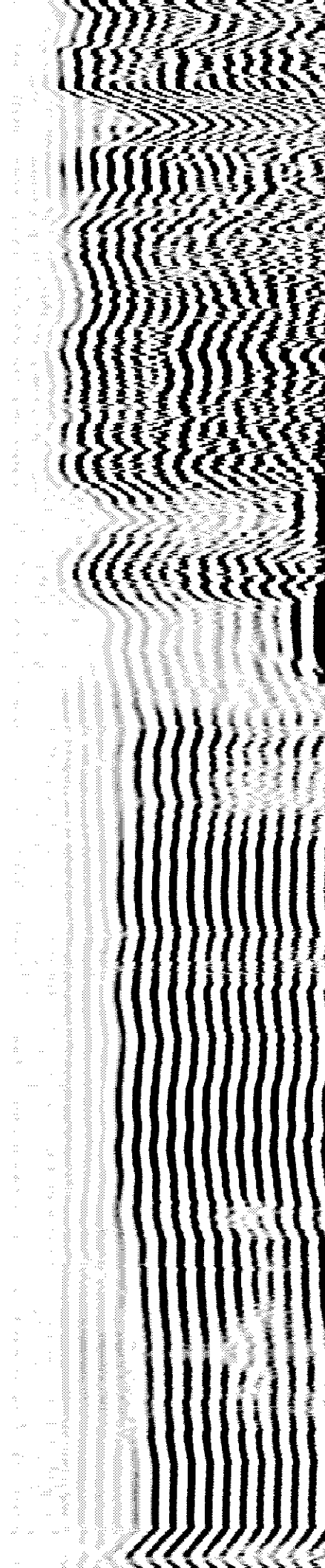
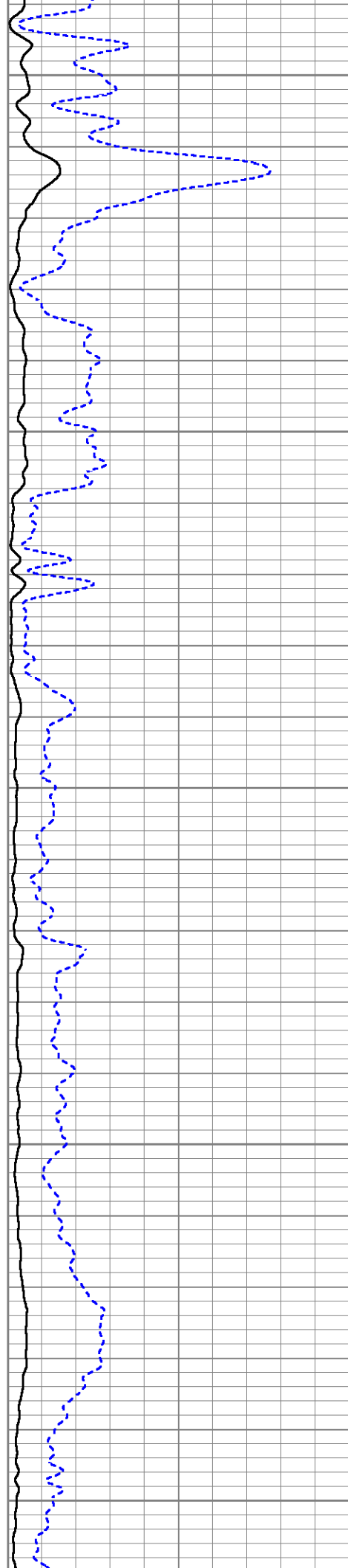
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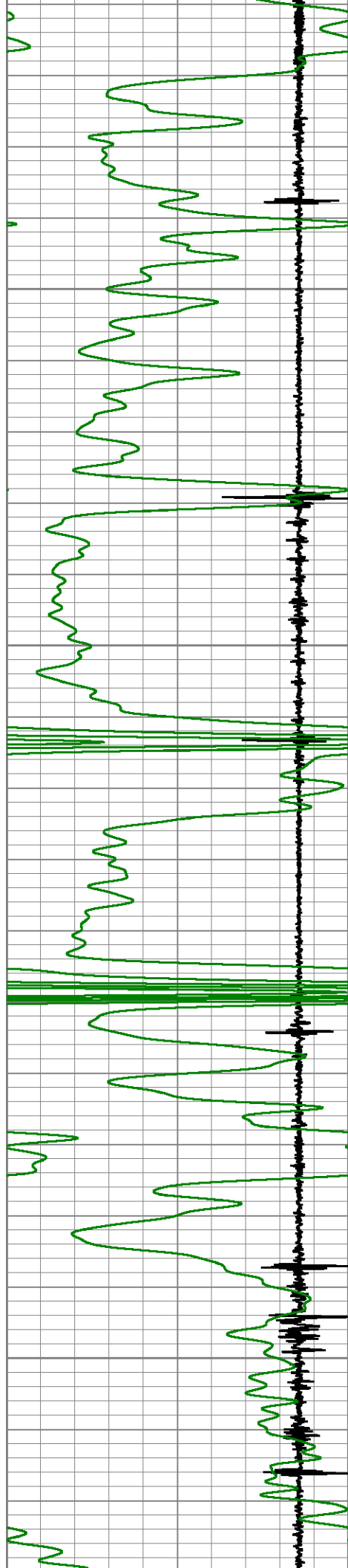
1900

1950

2000

2050



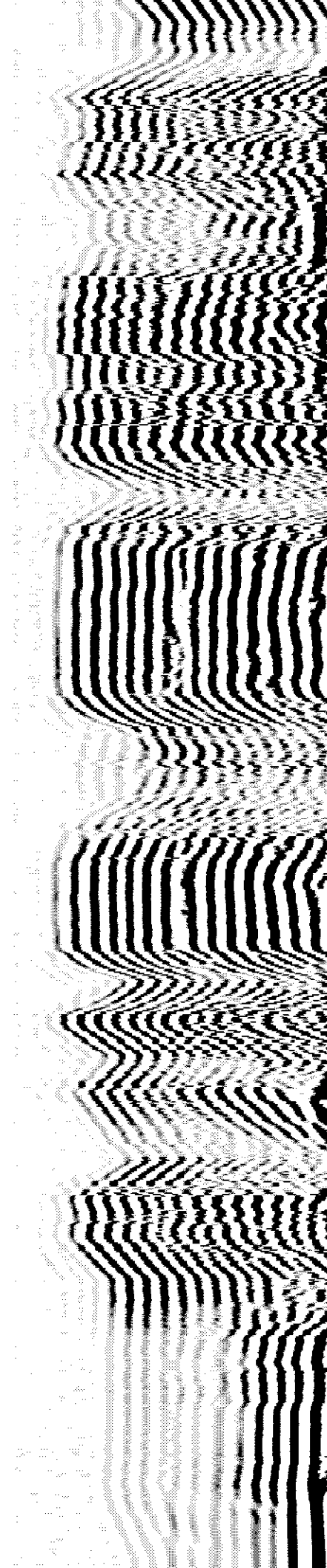
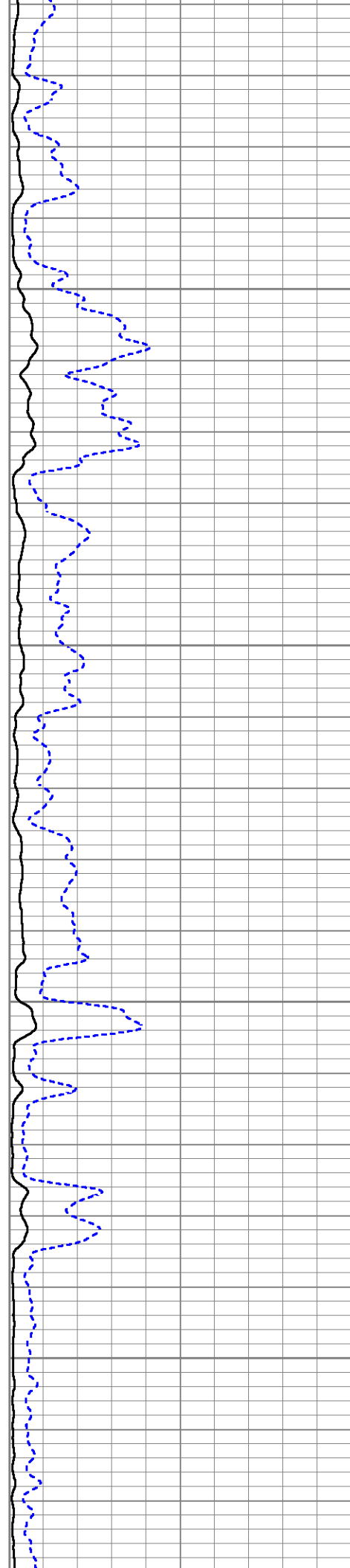


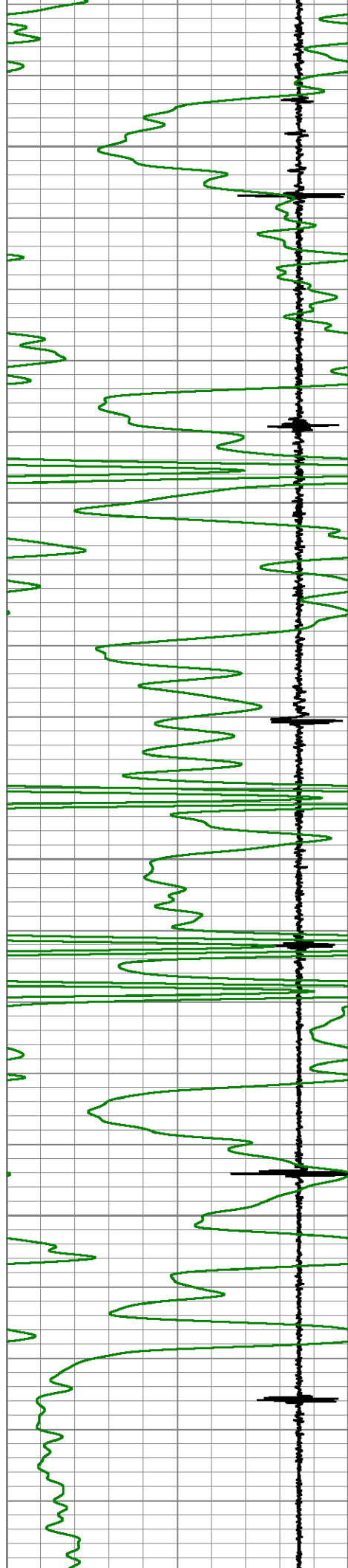
2100

2150

2200

2250





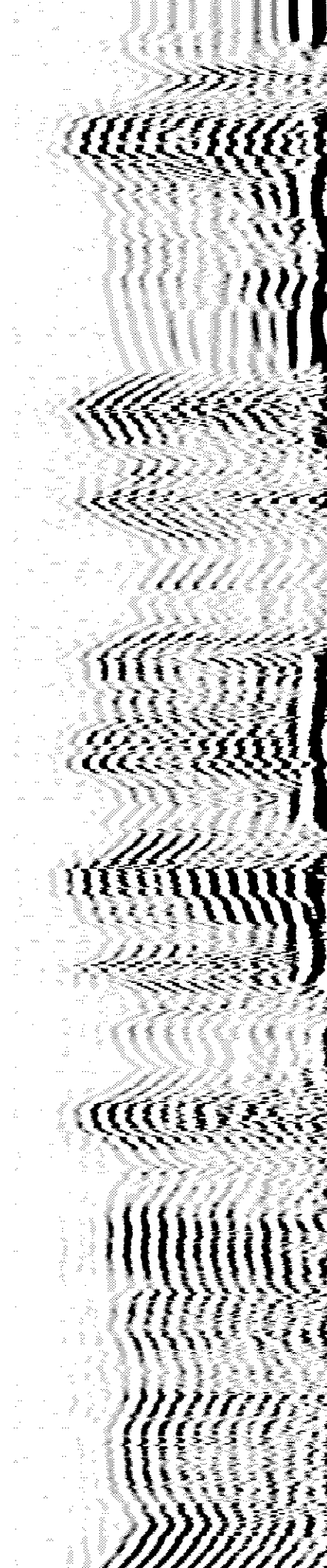
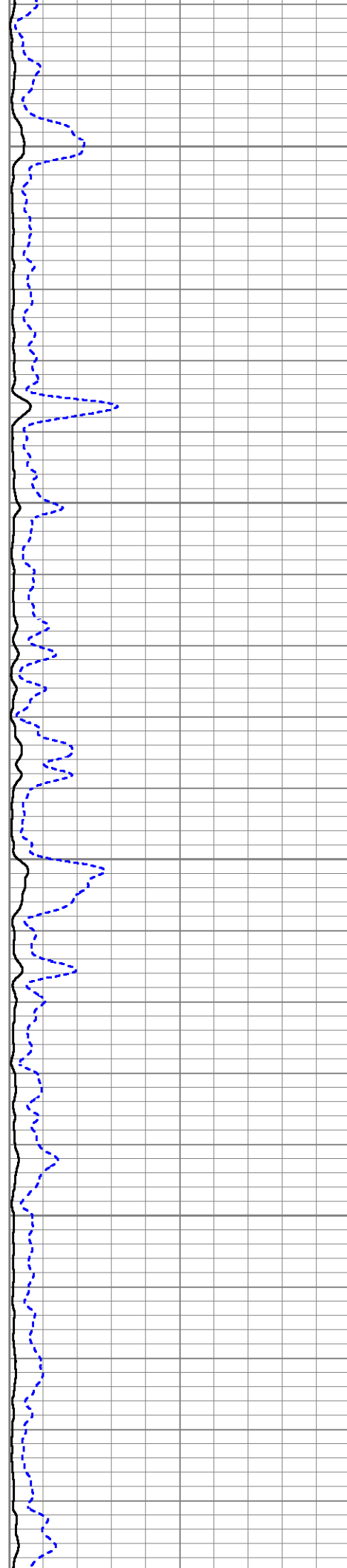
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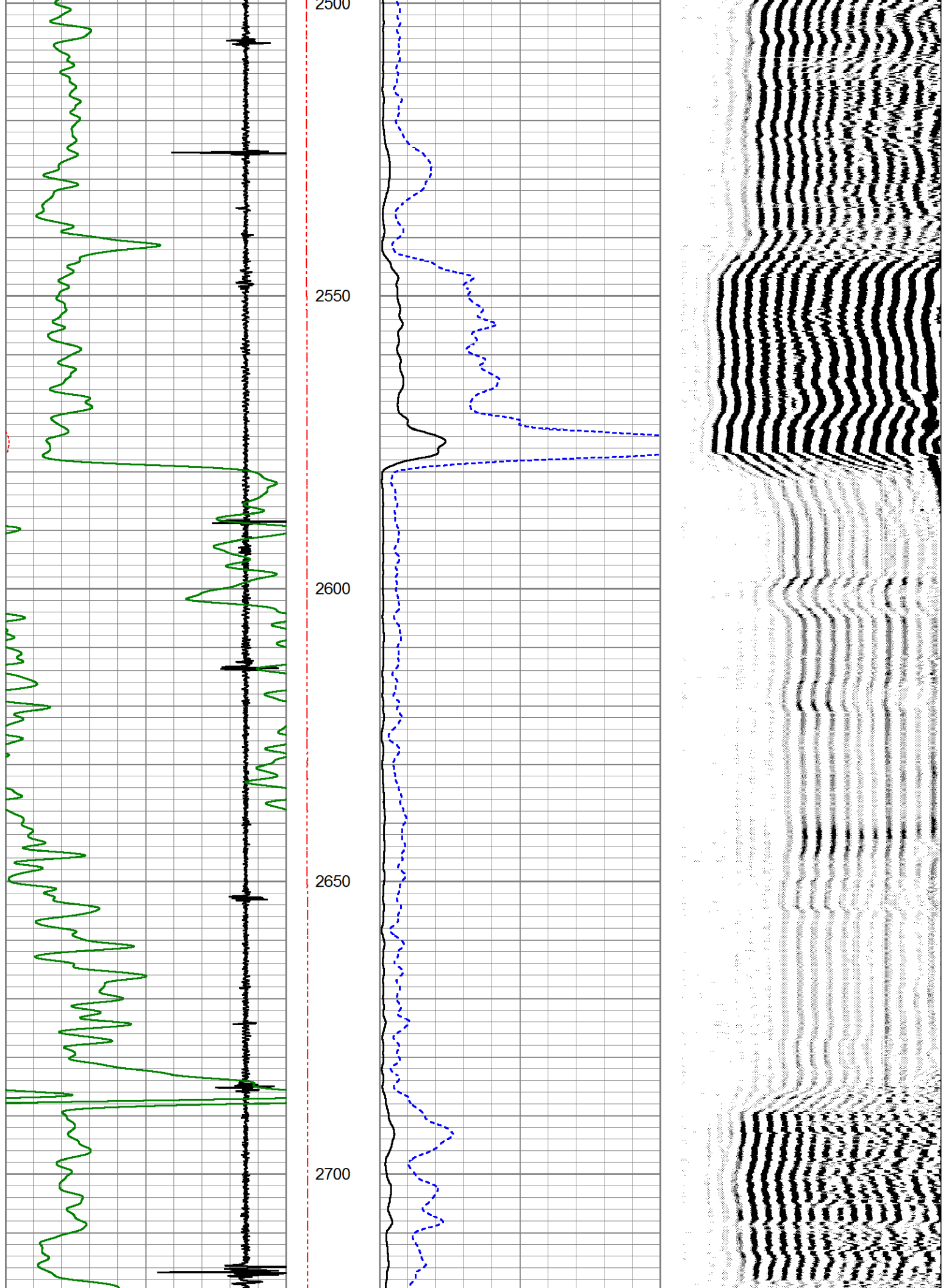
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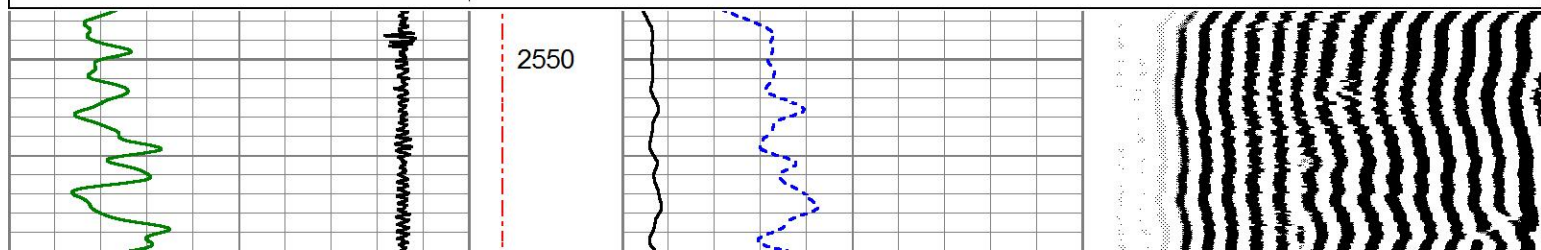
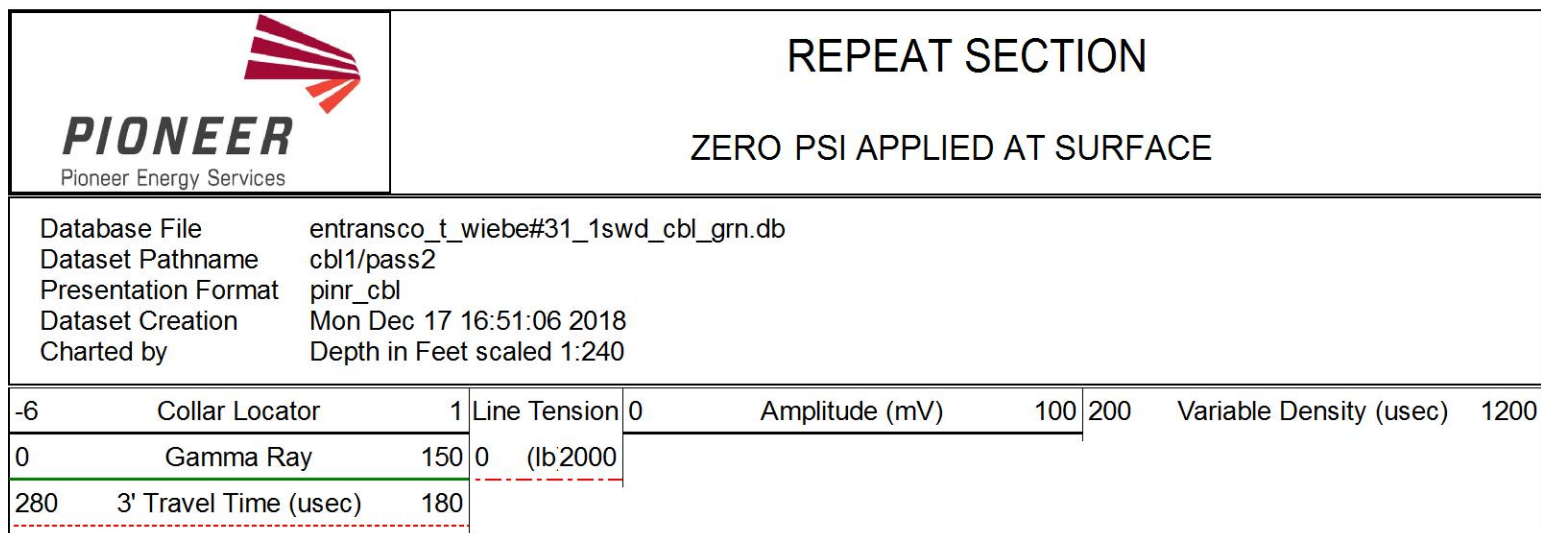
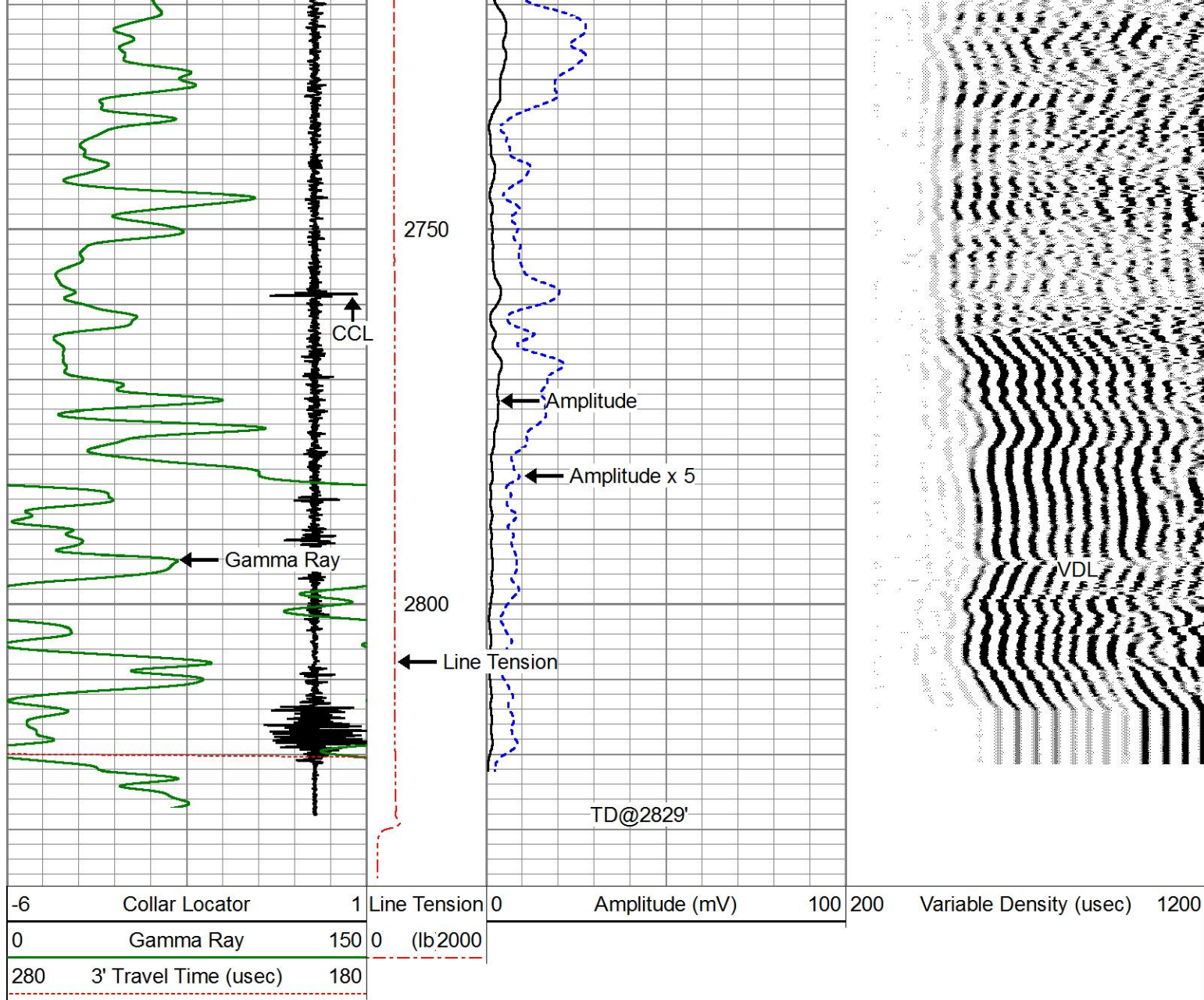
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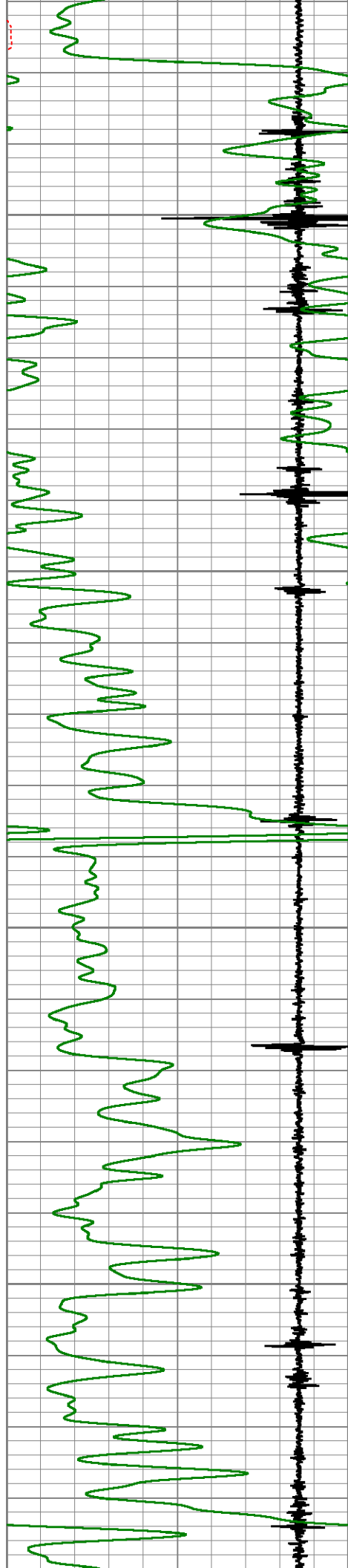
2450

2500







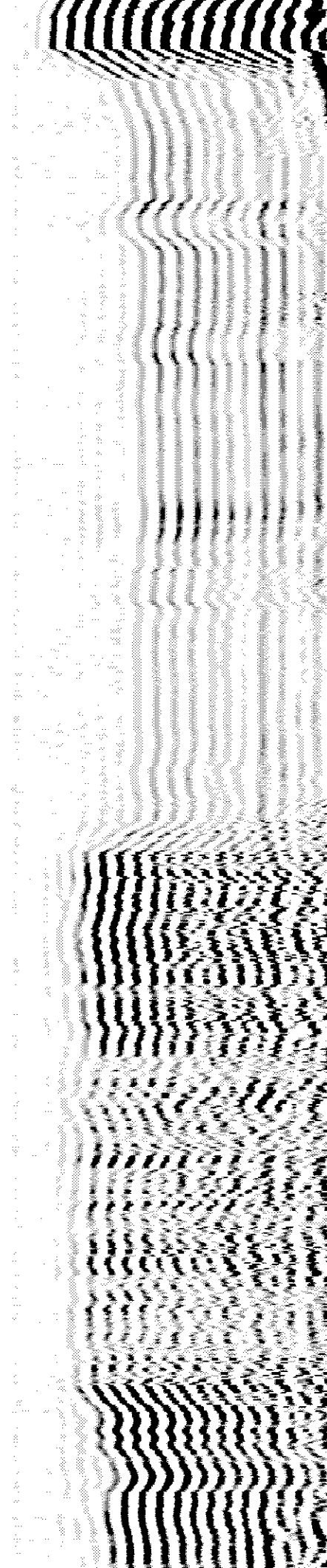
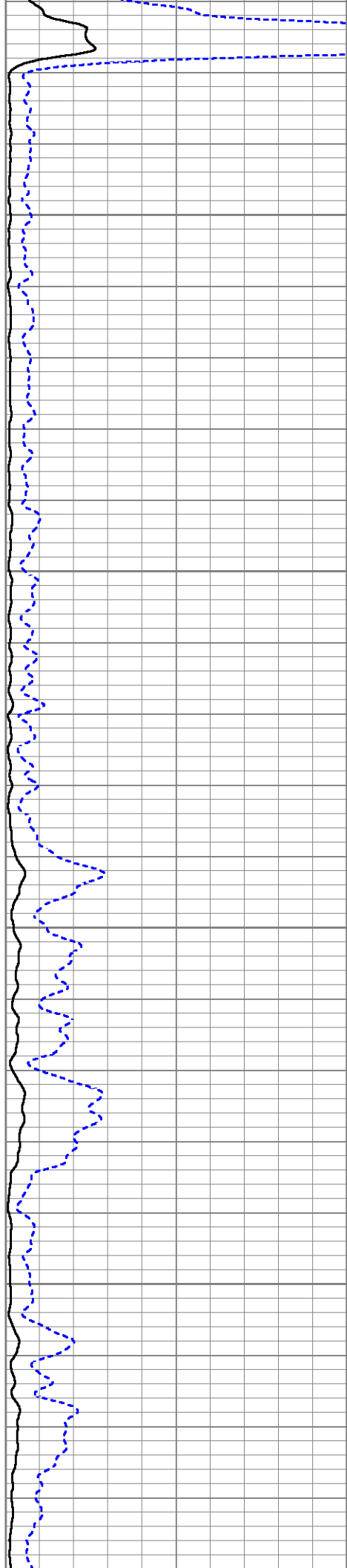


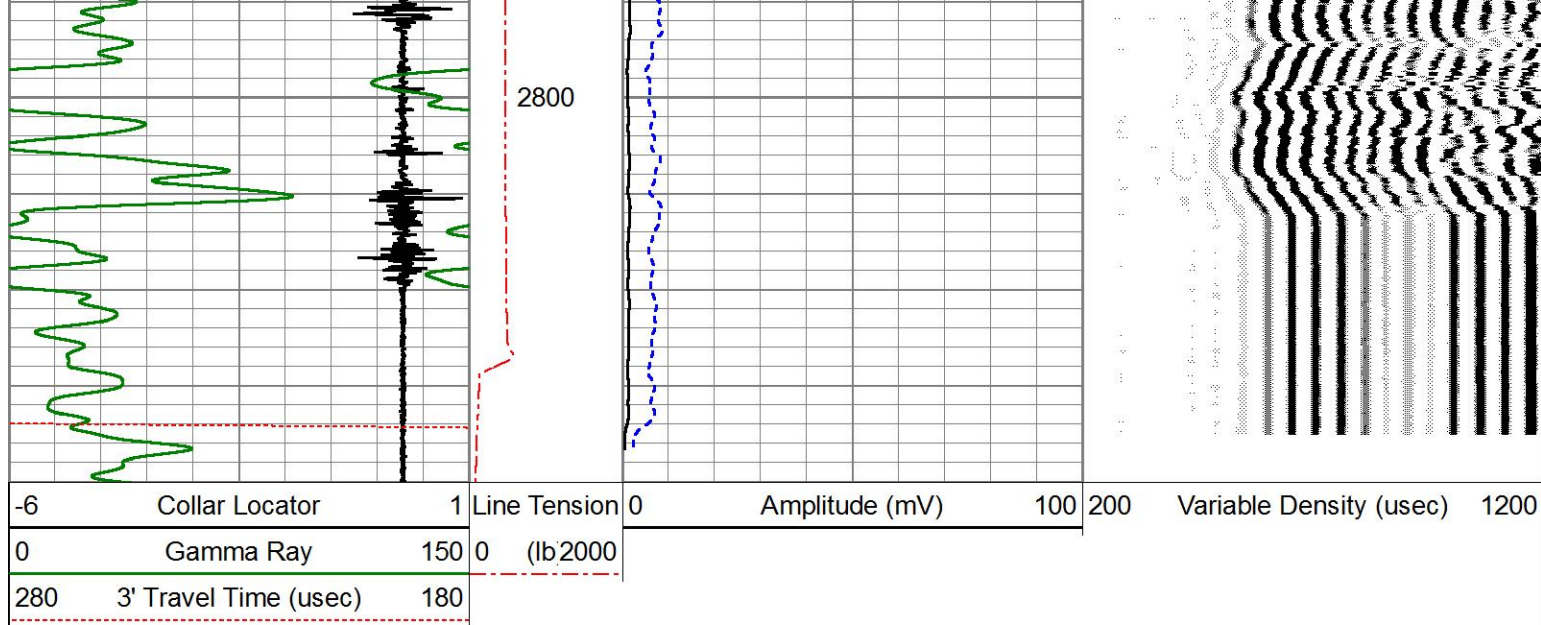
2600

2650

2700

2750





MAIN LOG

Calibration Report

Database File entransco_t_wiebe#31_1swd_cbl_grn.db
 Dataset Pathname cbl1/pass4
 Dataset Creation Mon Dec 17 17:00:28 2018

Neutron Calibration Report

Serial Number: ProbeNEU1
 Tool Model: PRNEU
 Performed: (Not Performed)

Calibrator Value: 1 NAPI
 Calibrator Reading: 1 cps
 Sensitivity: 1 NAPI/cps

Gamma Ray Calibration Report

Serial Number: 111032
 Tool Model: 2 3/4" Probe
 Performed: Tue Apr 03 09:45:00 2018

Calibrator Value: 1.0

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 1.1000 /cps

Segmented Cement Bond Log Calibration Report

Serial Number: 080554
 Tool Model: RBL-D

Calibration Casing Diameter: 5.500 in
 Calibration Depth: -3063.729 ft

Master Calibration performed Mon Dec 17 09:17:12 2018:

Master Calibration, performed Mon Dec 17 09:17:12 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	1.573	0.700	71.921	45.376	0.559
CAL	0.003	1.926				
5'	0.003	1.464	0.700	71.921	48.747	0.567
SUM						
S1	0.041	1.465	0.000	100.000	70.188	-2.859
S2	0.017	1.444	0.000	100.000	70.049	-1.156
S3	0.016	1.504	0.000	100.000	67.224	-1.082
S4	0.017	1.589	0.000	100.000	63.609	-1.083
S5	0.027	1.661	0.000	100.000	61.202	-1.627
S6	0.026	1.700	0.000	100.000	59.723	-1.559
S7	0.015	1.660	0.000	100.000	60.800	-0.899
S8	0.014	1.518	0.000	100.000	66.497	-0.960

Air Zero Calibration, performed Mon Dec 17 16:35:41 2018:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.005		0.000		-0.002	
5'	0.009		0.000		-0.006	
SUM						
S1	0.009		0.000		0.031	
S2	0.004		0.000		0.013	
S3	0.005		0.000		0.011	
S4	0.007		0.000		0.010	
S5	0.007		0.000		0.019	
S6	0.006		0.000		0.020	
S7	0.012		0.000		0.002	
S8	0.006		0.000		0.008	



Company ENTRANSCO ENERGY, LLC
 Well T.WIEBE #31-1 SWD
 Field HAZLETT
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