



GAMMA RAY NEUTRON LOG

PIONEER
Pioneer Energy Services

Company **ENTRANSO ENERGY, LLC**
Well **T.WIEBE #31-1 SWD**
Field **HAZLETT**
County **BUTLER** State **KS**

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

Location: API # : 15-015-24118-00-00
120' FNL & 540' FEL
NW NE NE NE
SEC 31 TWP 23S RGE 5E
Permanent Datum GL
Log Measured From KB 6' Above Perm. Datum
Drilling Measured From KB
CBL
MAST TRAILER
Elevation
K.B. 1475'
D.F. 1474'
G.L. 1469'

Date of Service 12/17/2018

Run Number ONE

Depth Driller or PBTD 3100'

Depth Logger 2829'

Bottom Log Interval 2827'

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
Surface Casing
Production Casing
Liner Record

8.625"
5.5"

23#
15.5 #

00'
00'
TD

<<< 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

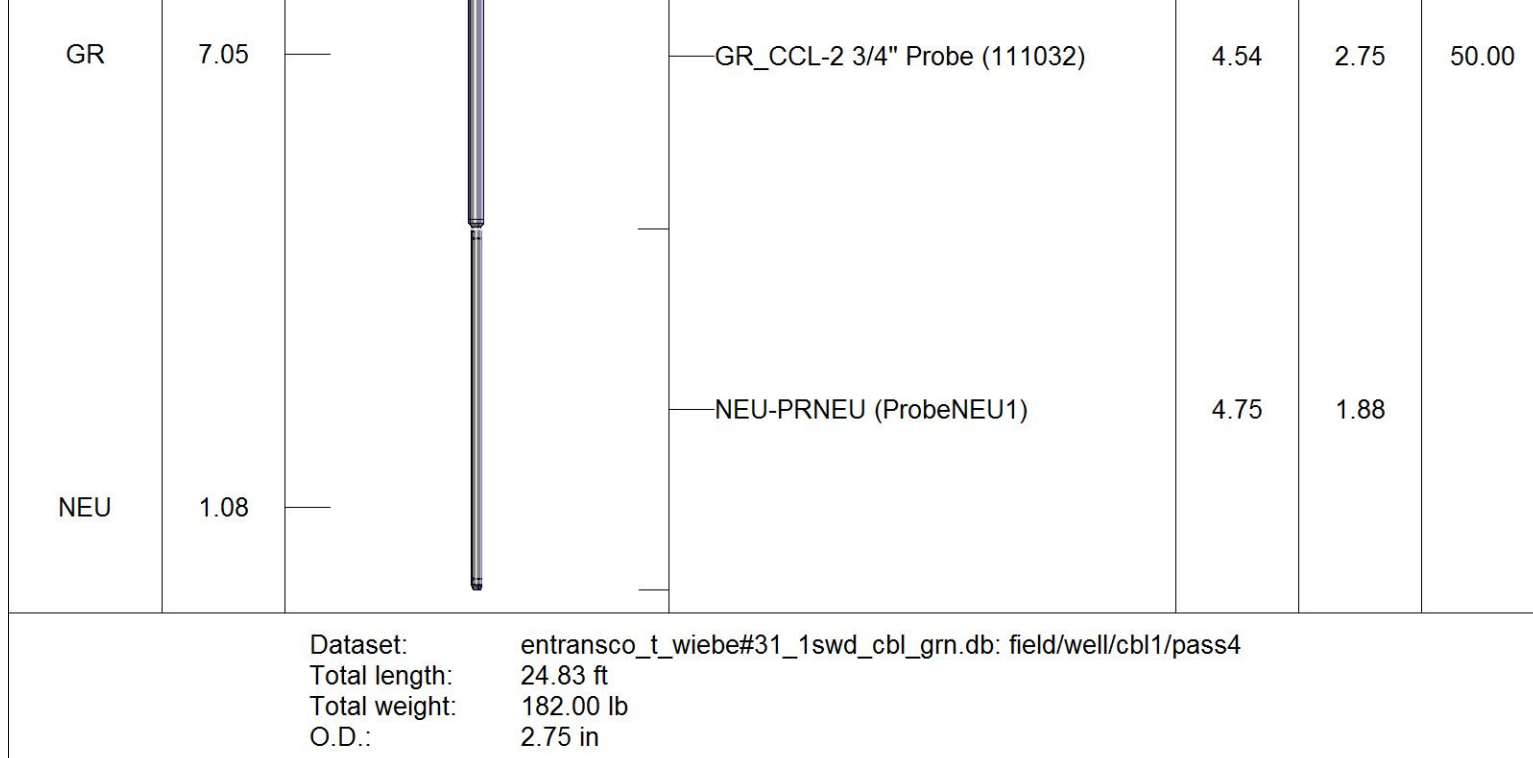
BOREID in 7.875	BOTTEMP degF 101	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 15.5	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.08
NPORSEL Limestone	NPORSHIFT 0	PERFS 0	PPT usec 0	SRFTEMP degF 57	TDEPTH ft 2600		

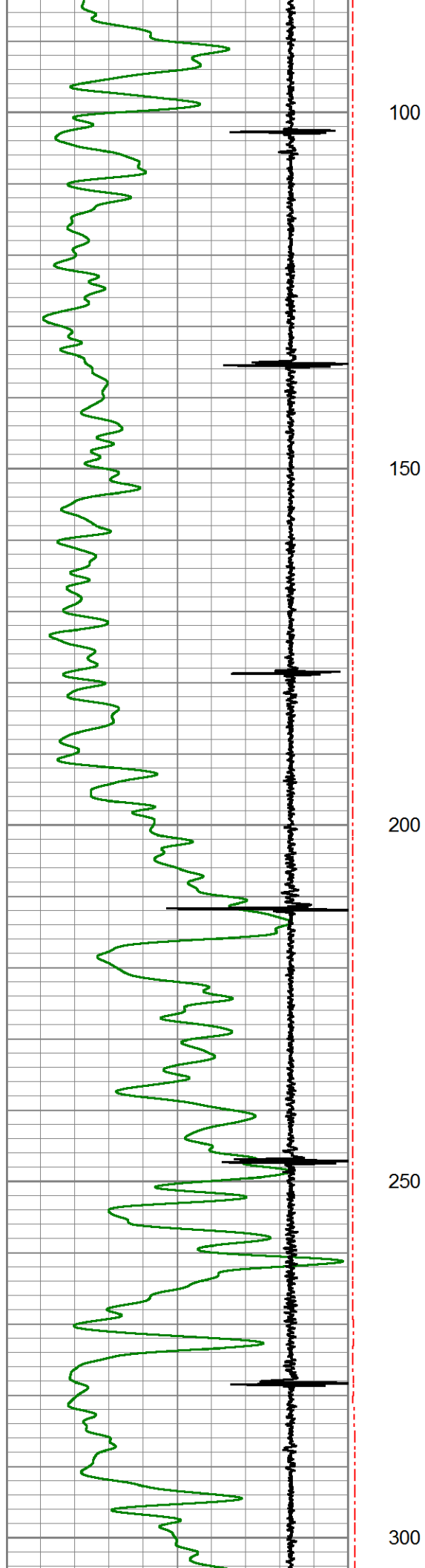
Variable Description

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
WVFS8	16.36		PROBE-RBT-DIGITAL-RBL-D (080554) Probe 2 3/4" Radii Bond-Digital	8.75	2.75	100.00
WVFS7	16.36					
WVFS6	16.36					
WVFS5	16.36					
WVFS4	16.36					
WVFS3	16.36					
WVFS2	16.36					
WVFS1	16.36					
WVFCAL	16.36					
WV3FT	16.36					
WV5FT	15.36					
HEADVOLT	12.17		Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	8.39					





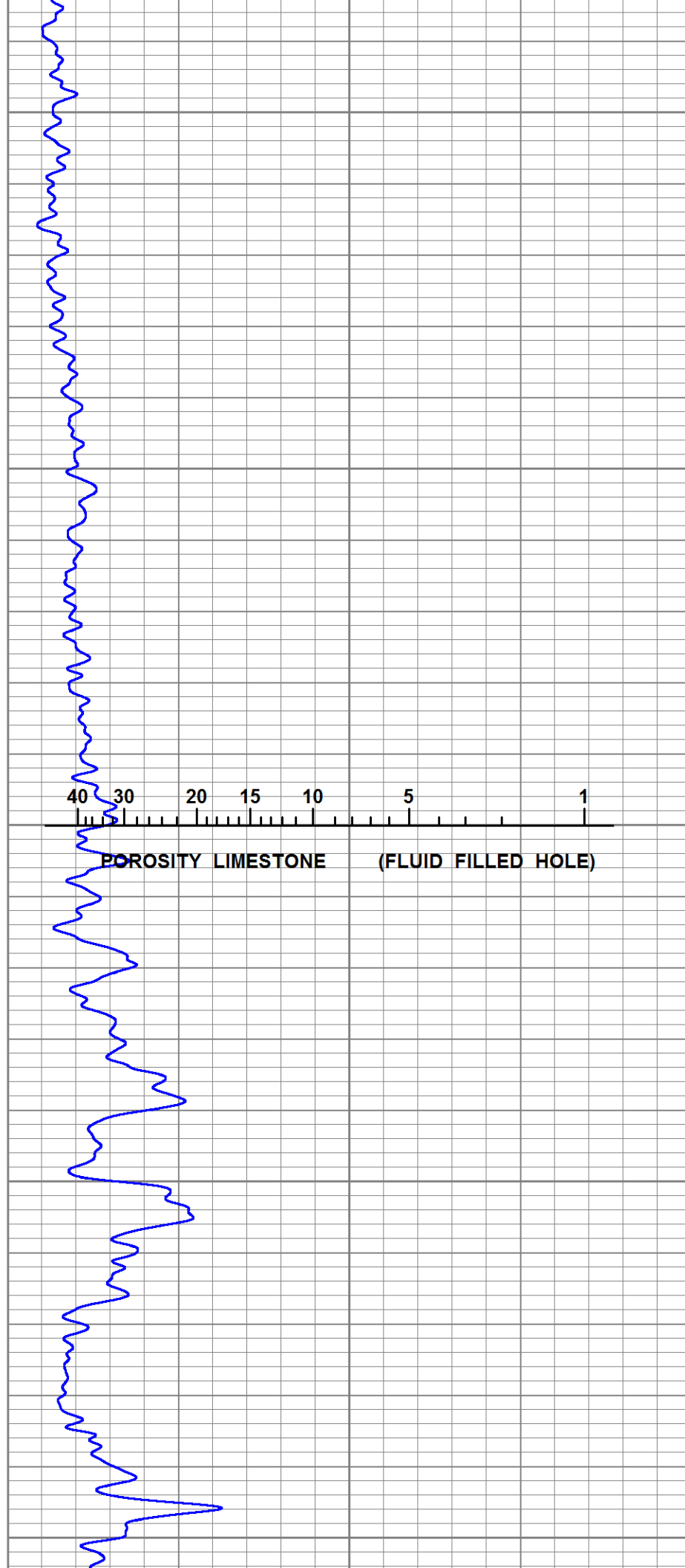
100

150

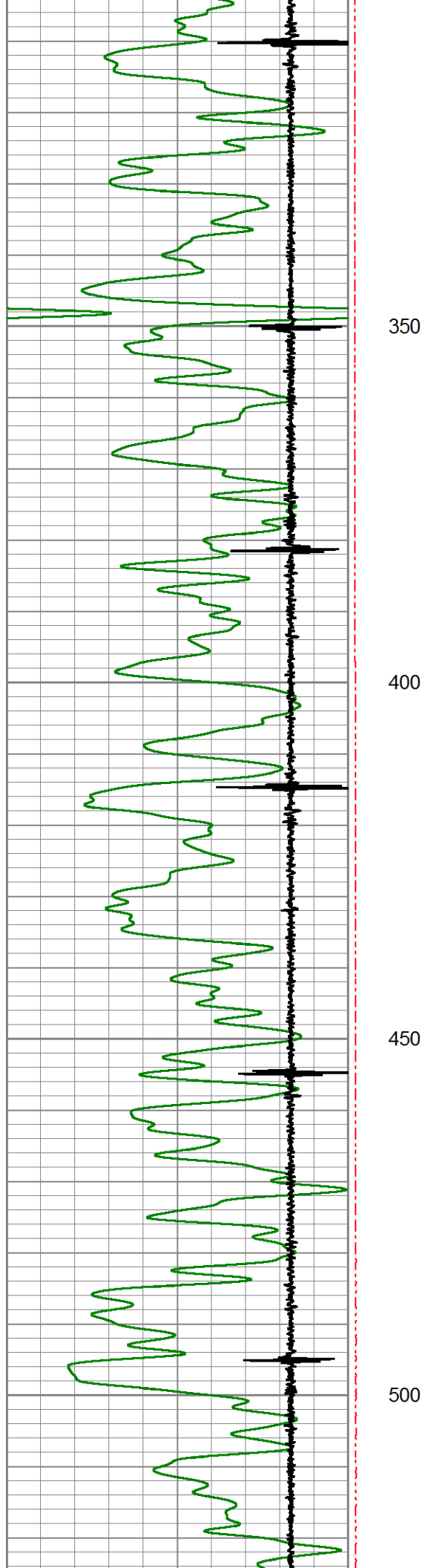
200

250

300



40 30 20 15 10 5 1
POROSITY LIMESTONE (FLUID FILLED HOLE)

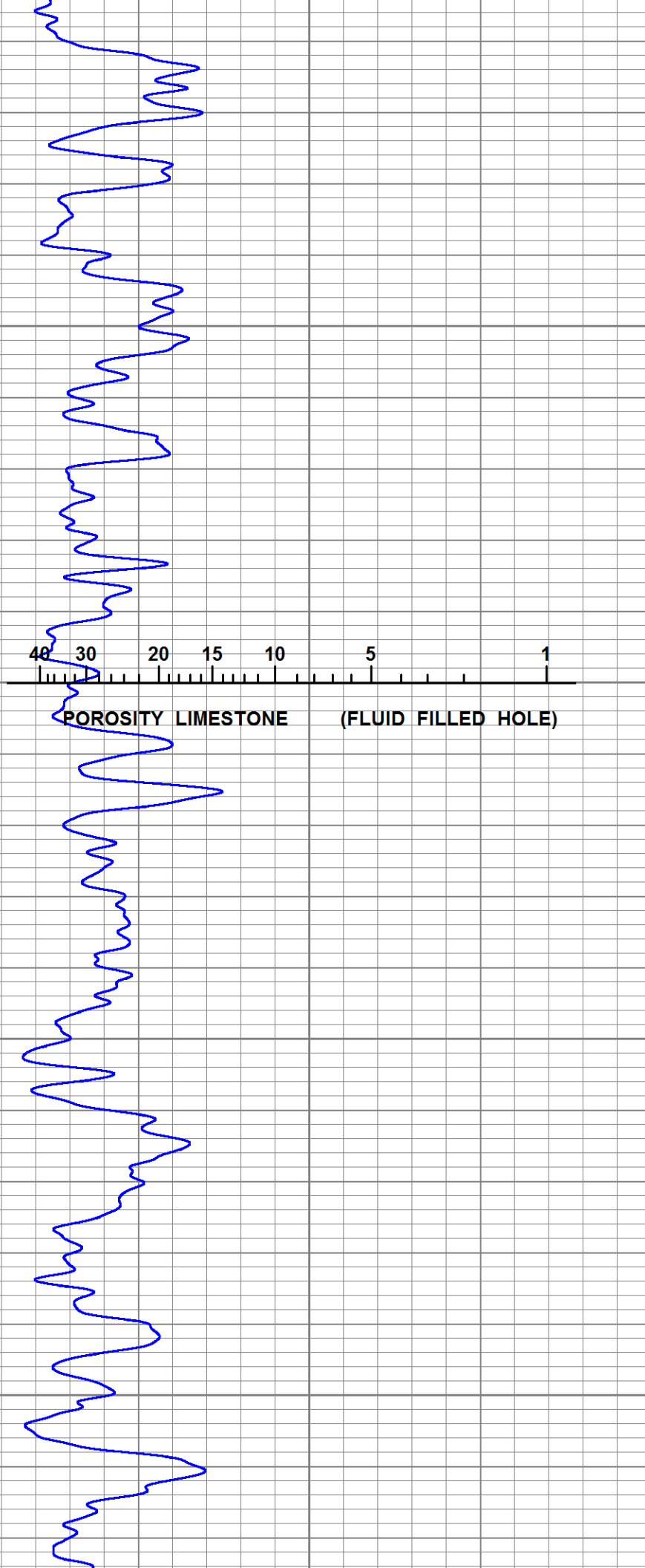


350

400

450

500



40

30

20

15

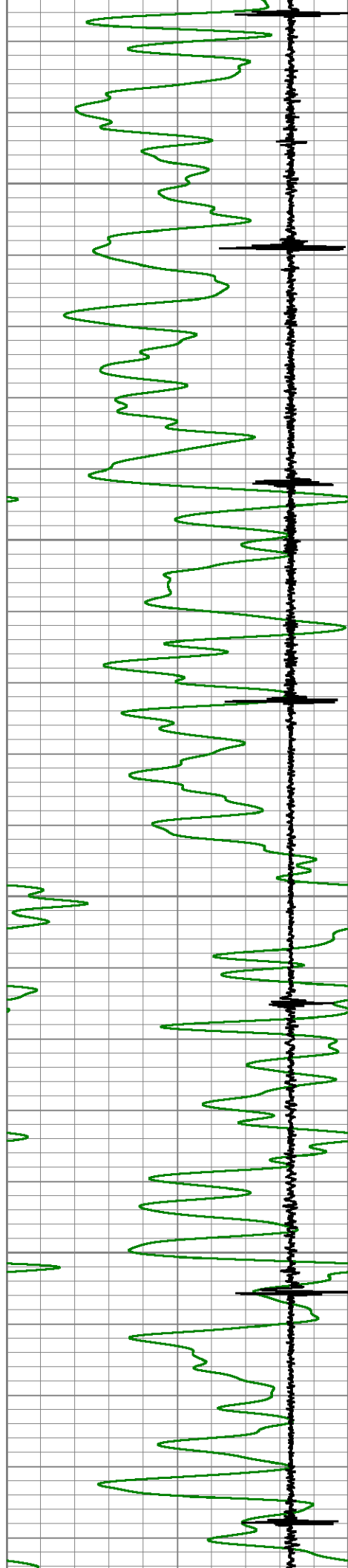
10

5

1

POROSITY LIMESTONE

(FLUID FILLED HOLE)

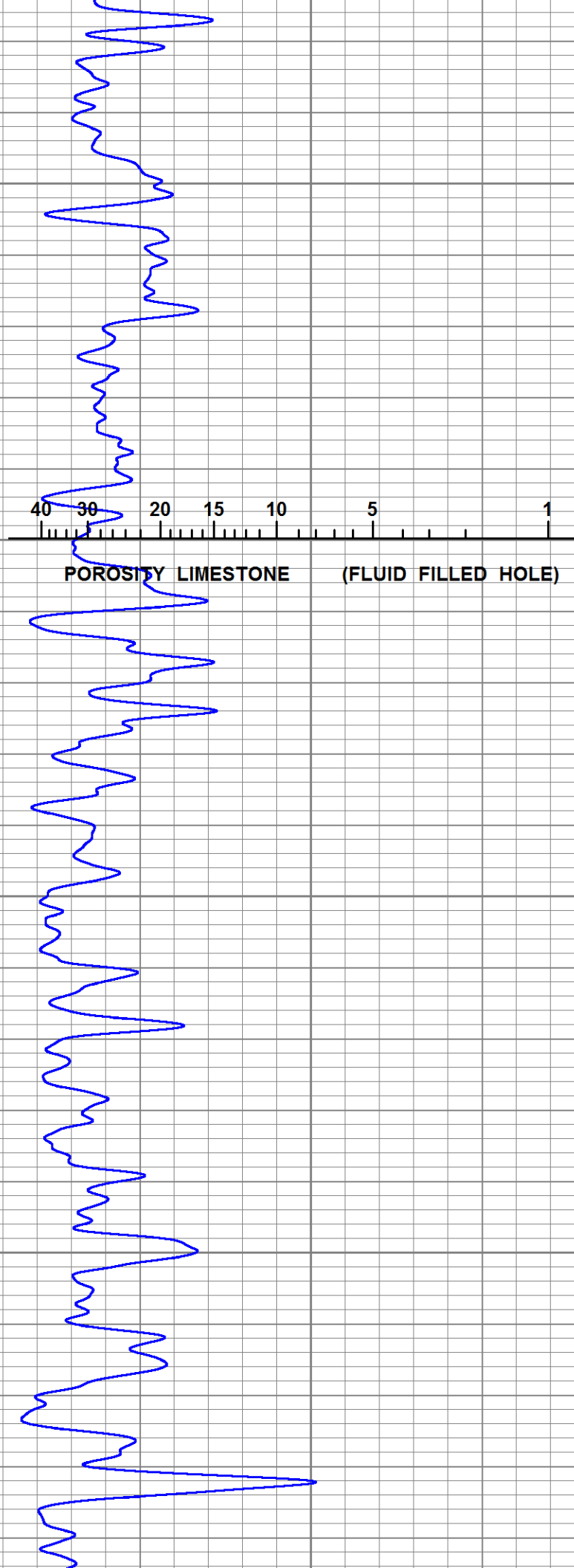


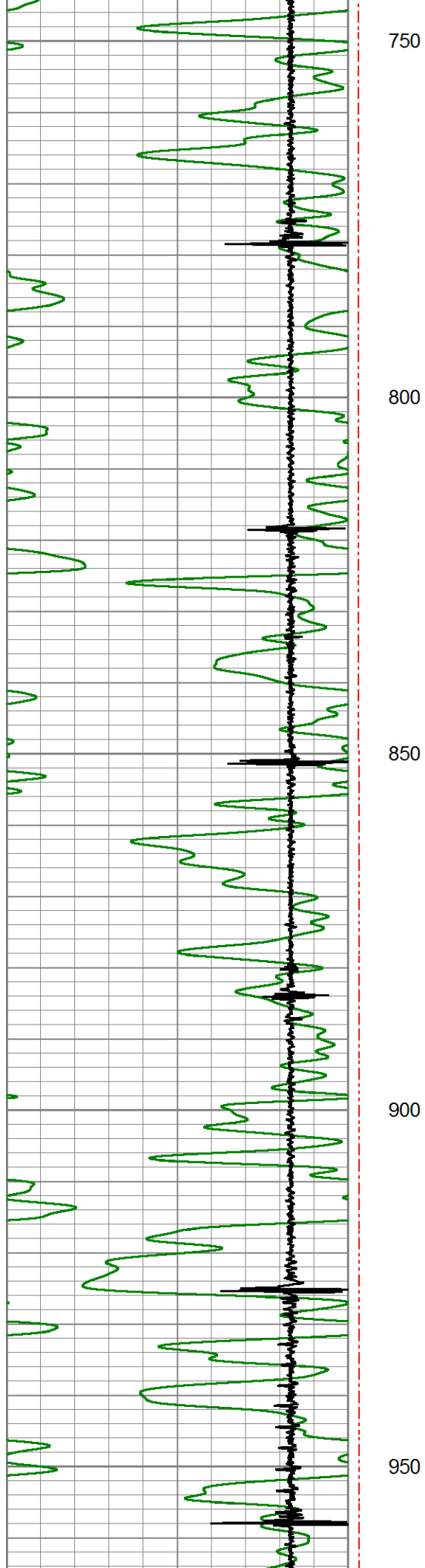
550

600

650

700





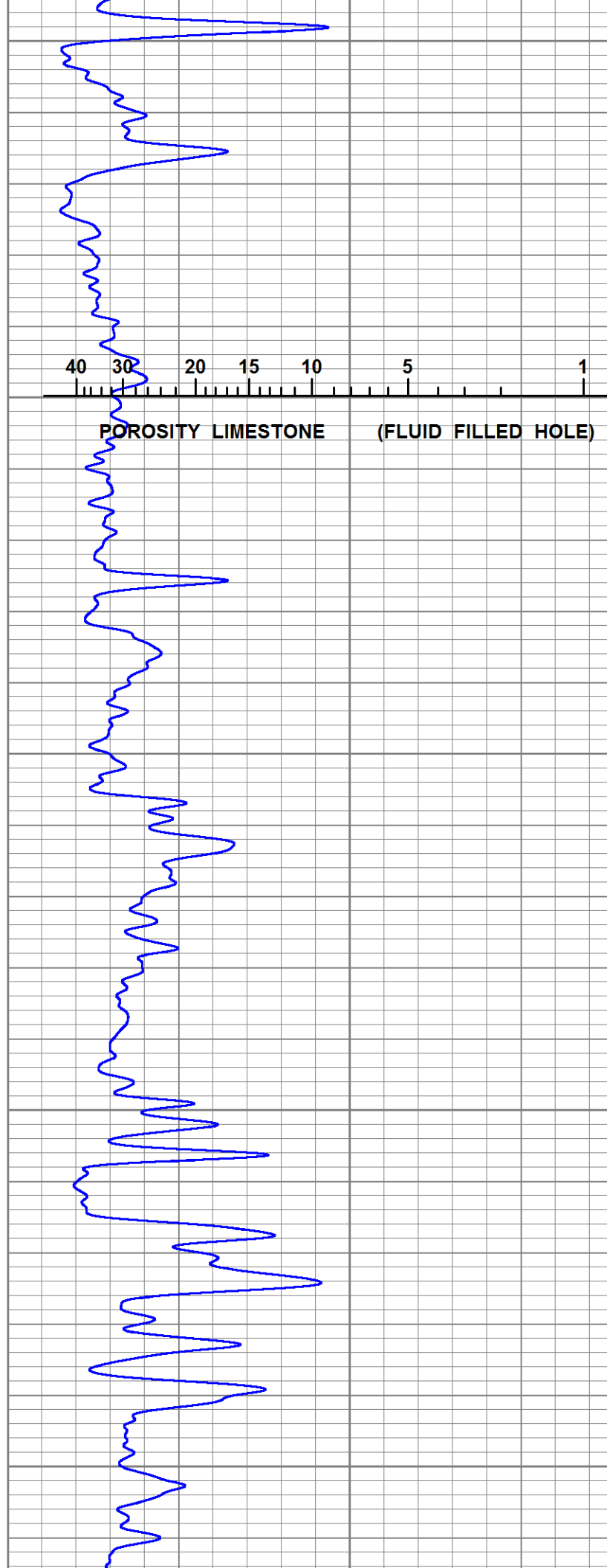
750

800

850

900

950



40

30

20

15

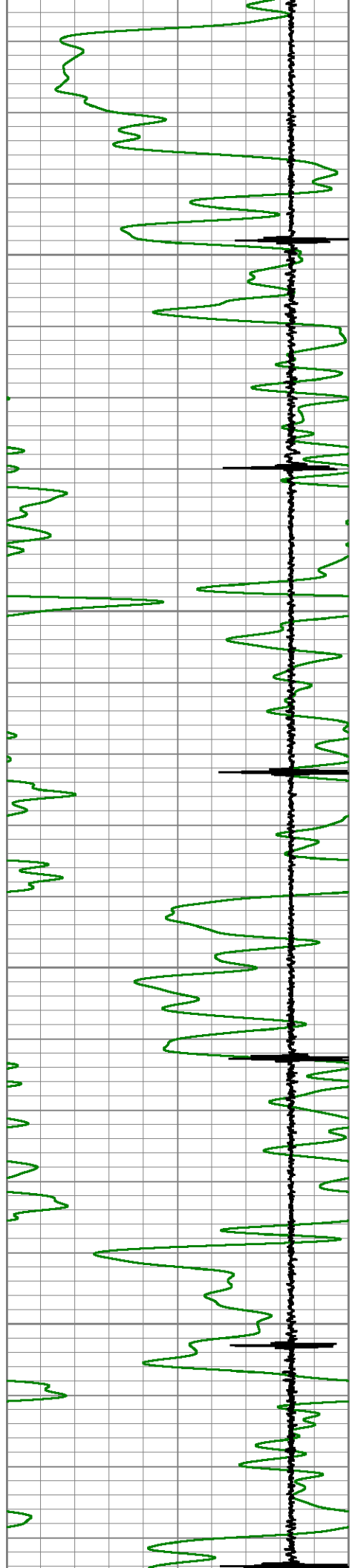
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1

POROSITY LIMESTONE

(FLUID FILLED HOLE)

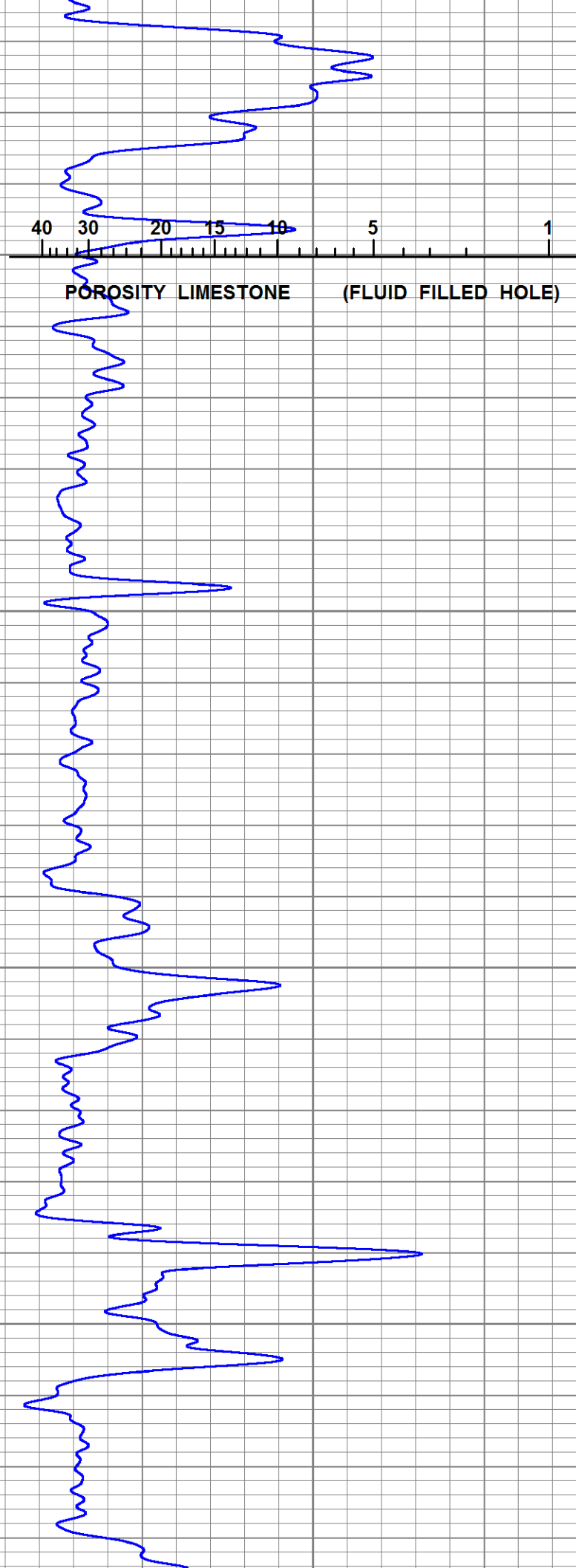


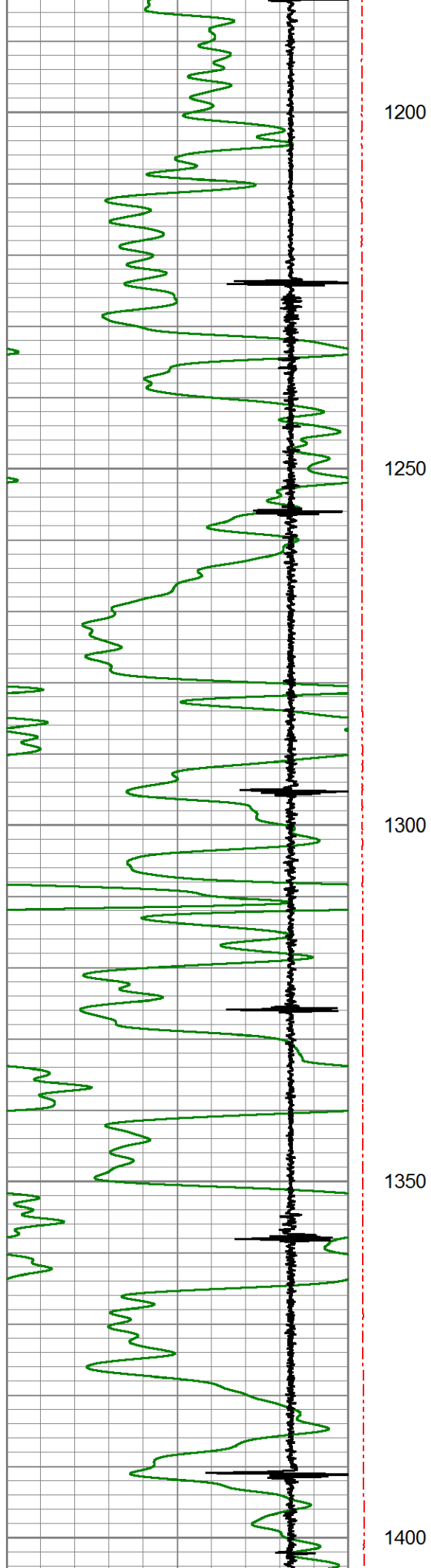
1000

1050

1100

1150





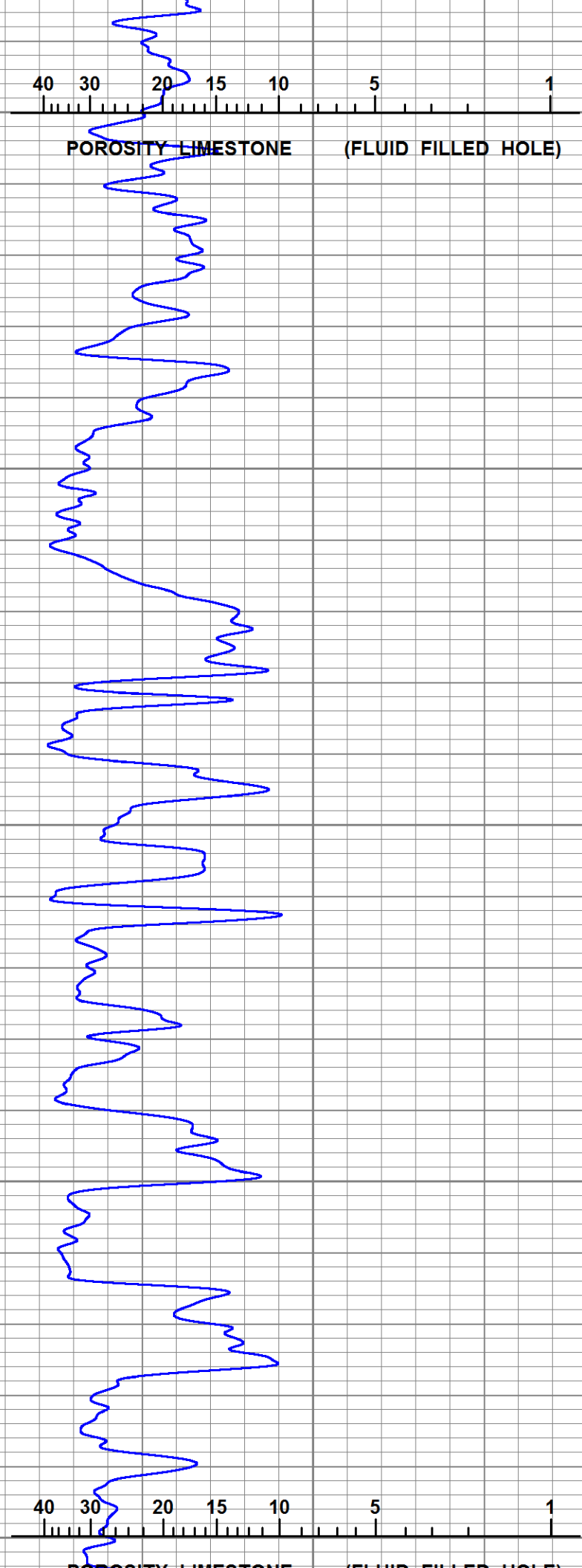
1200

1250

1300

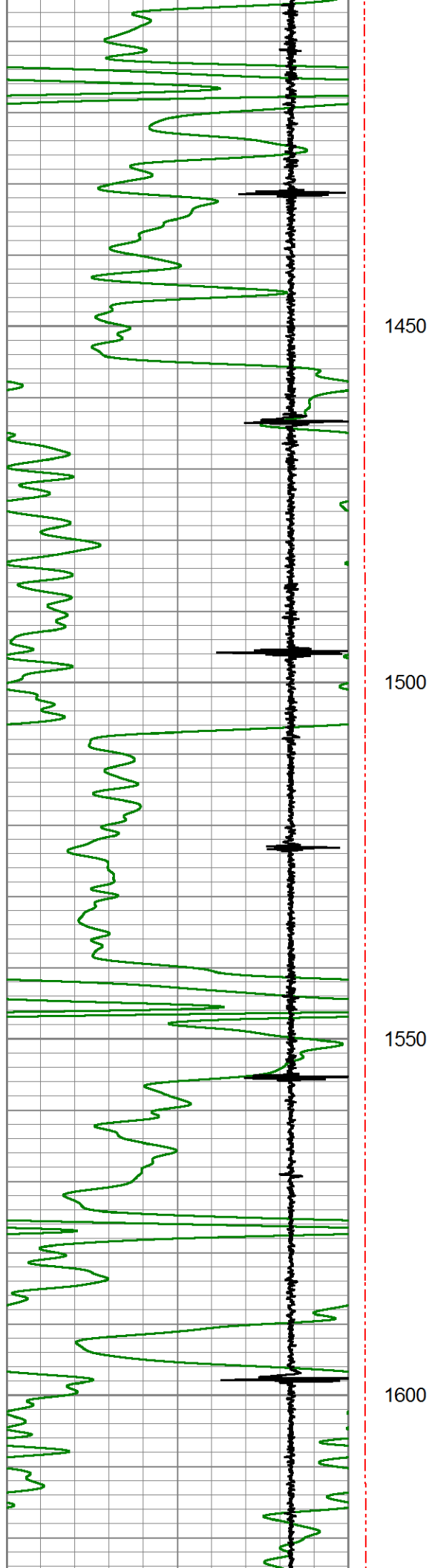
1350

1400



POROSITY LIMESTONE (FLUID FILLED HOLE)

POROSITY LIMESTONE (FLUID FILLED HOLE)

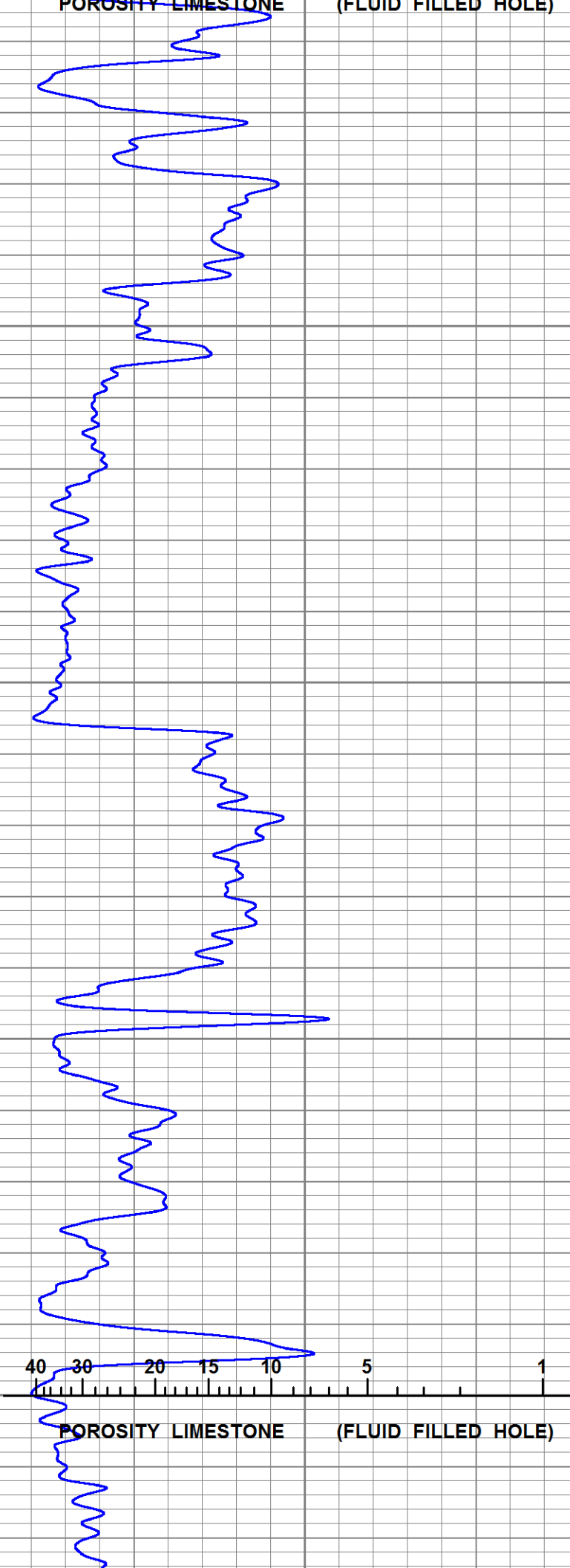


1450

1500

1550

1600



40

30

20

15

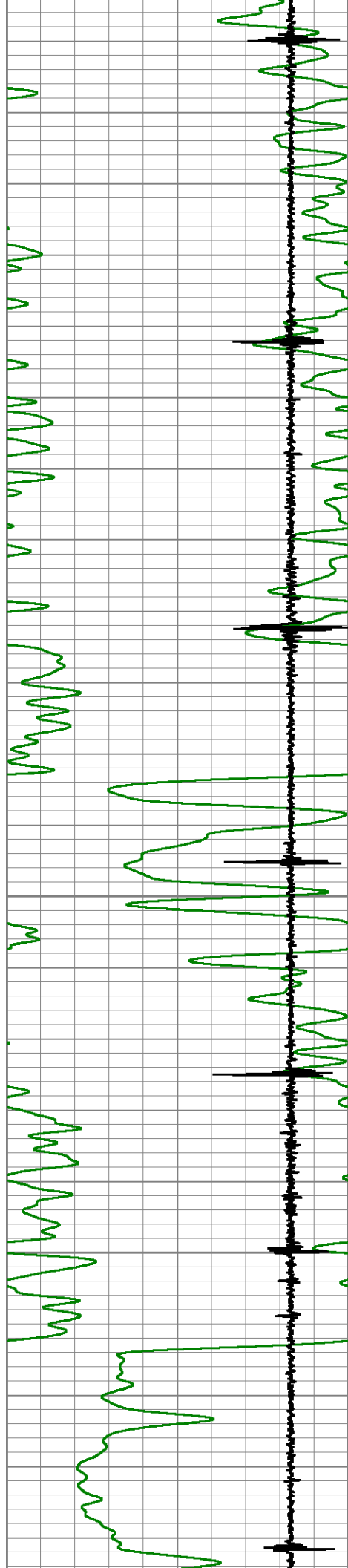
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5

1

POROSITY LIMESTONE

(FLUID FILLED HOLE)

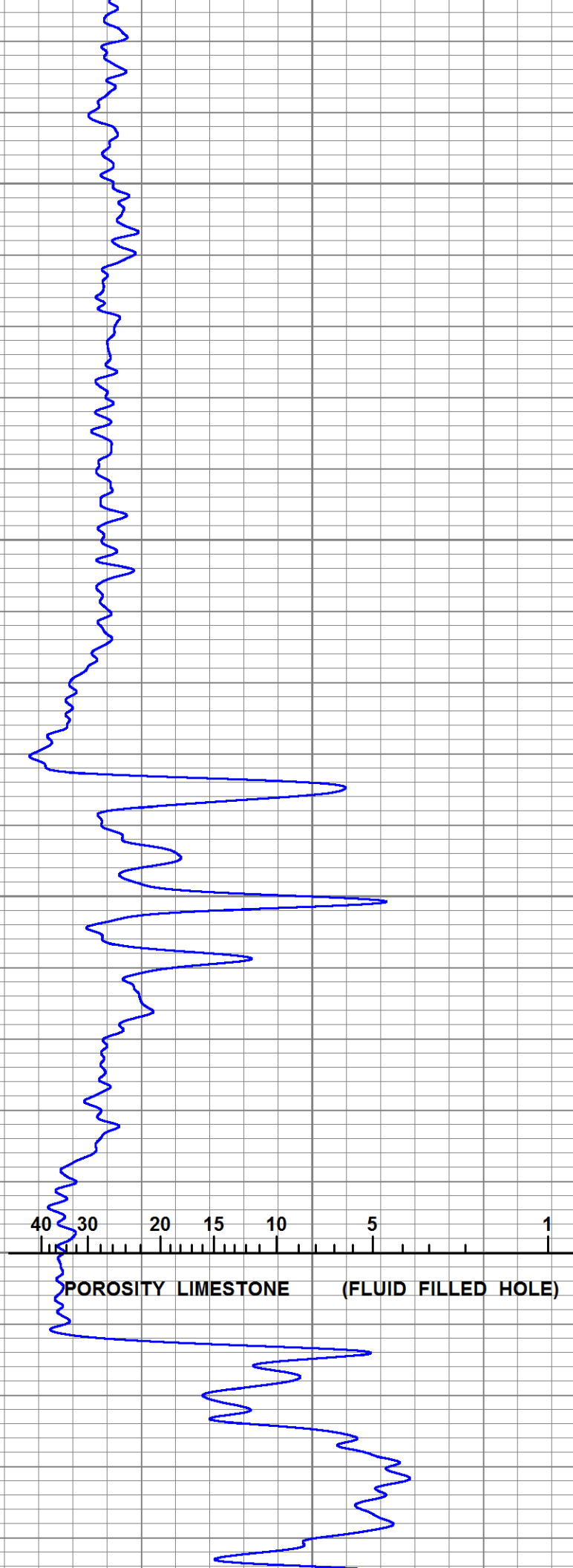


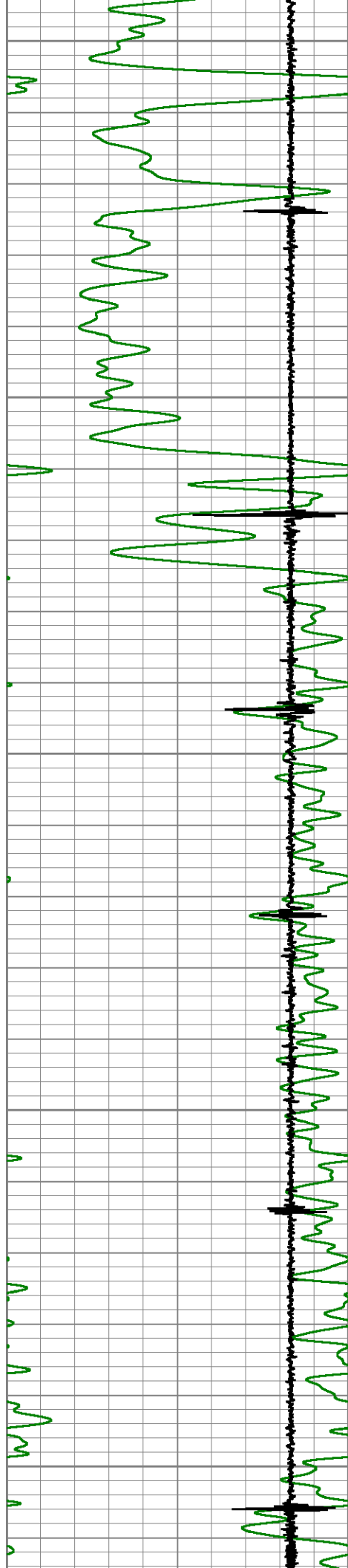
1650

1700

1750

1800





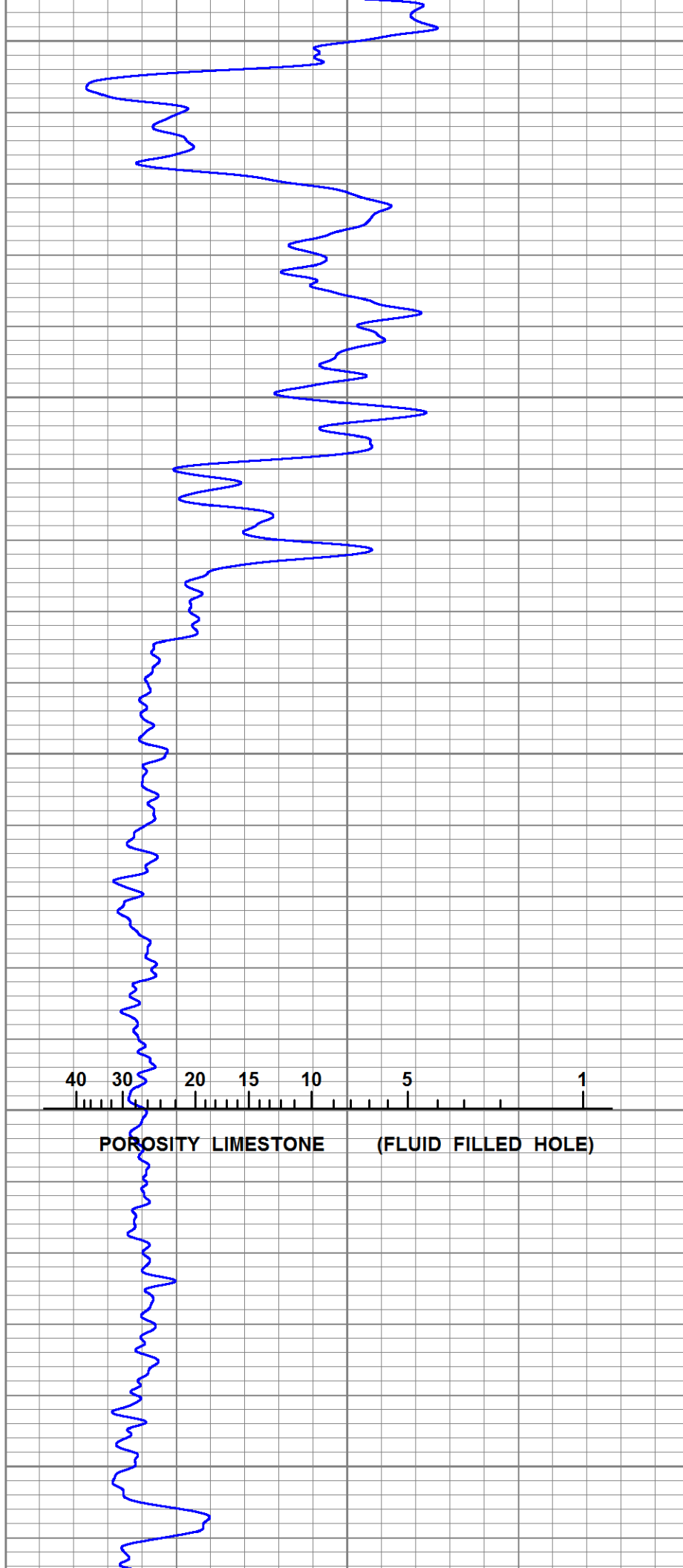
1850

1900

1950

2000

2050



40

30

20

15

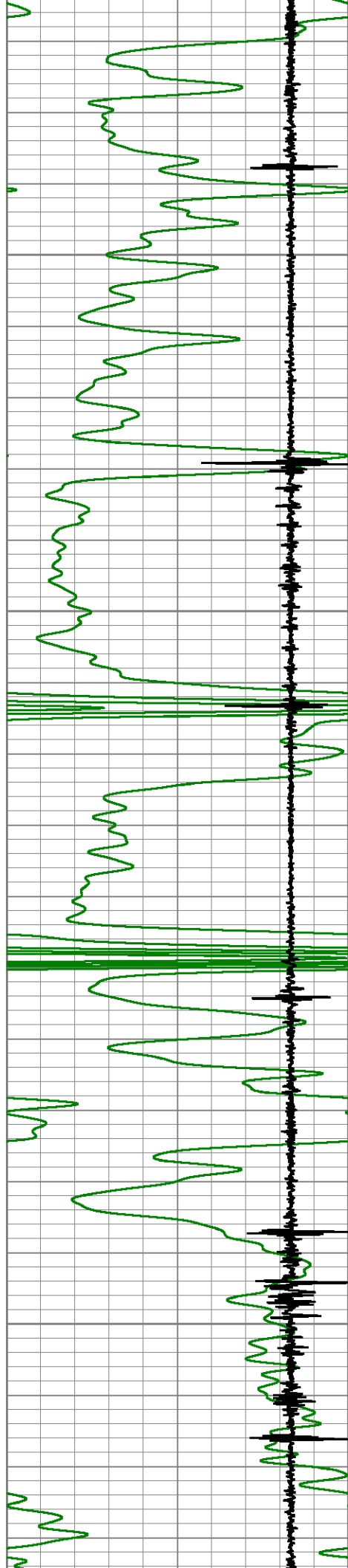
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5

1

POROSITY LIMESTONE

(FLUID FILLED HOLE)

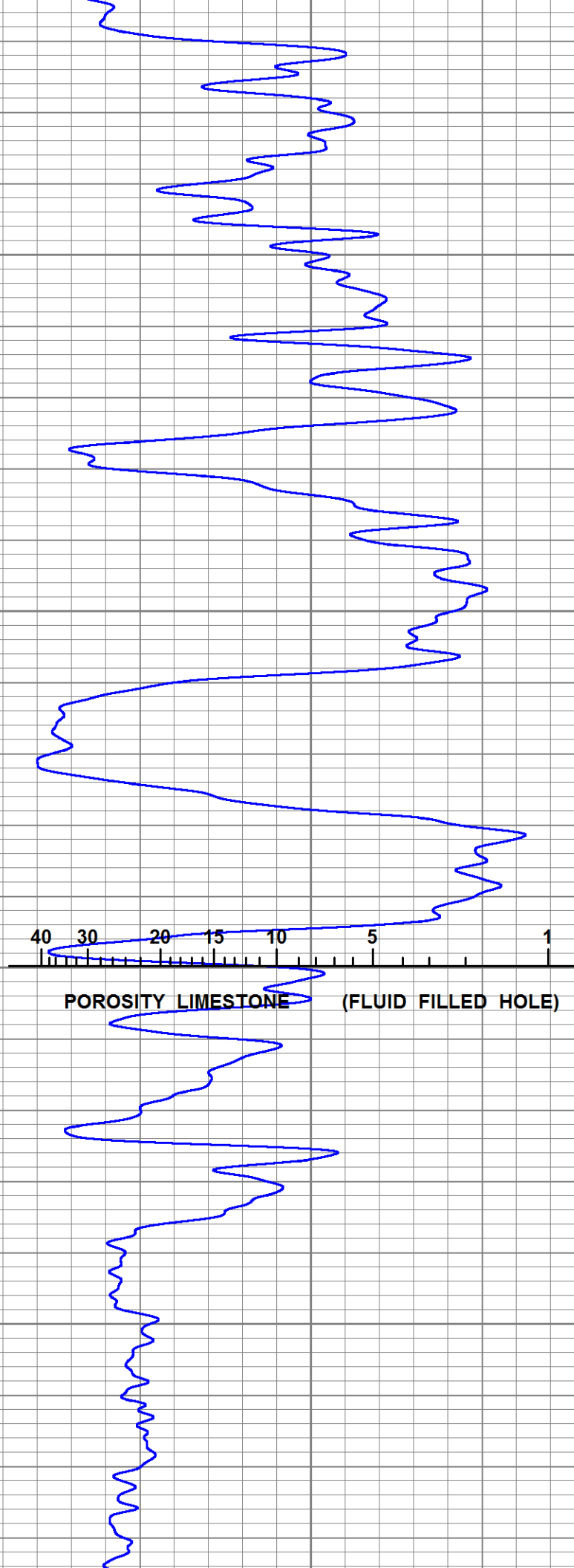


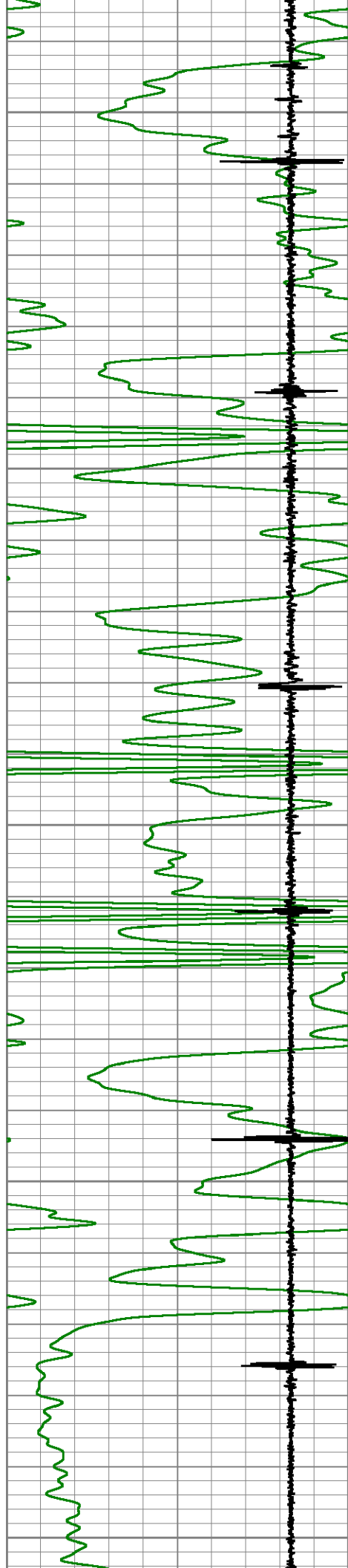
2100

2150

2200

2250





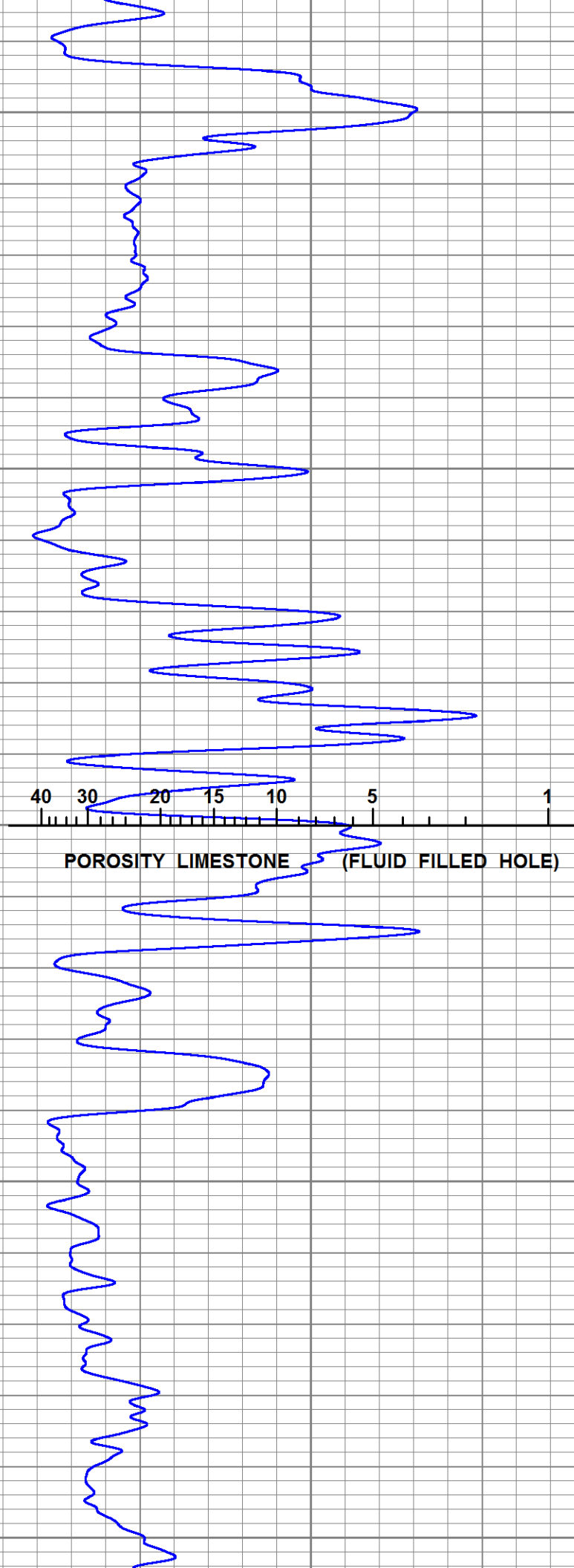
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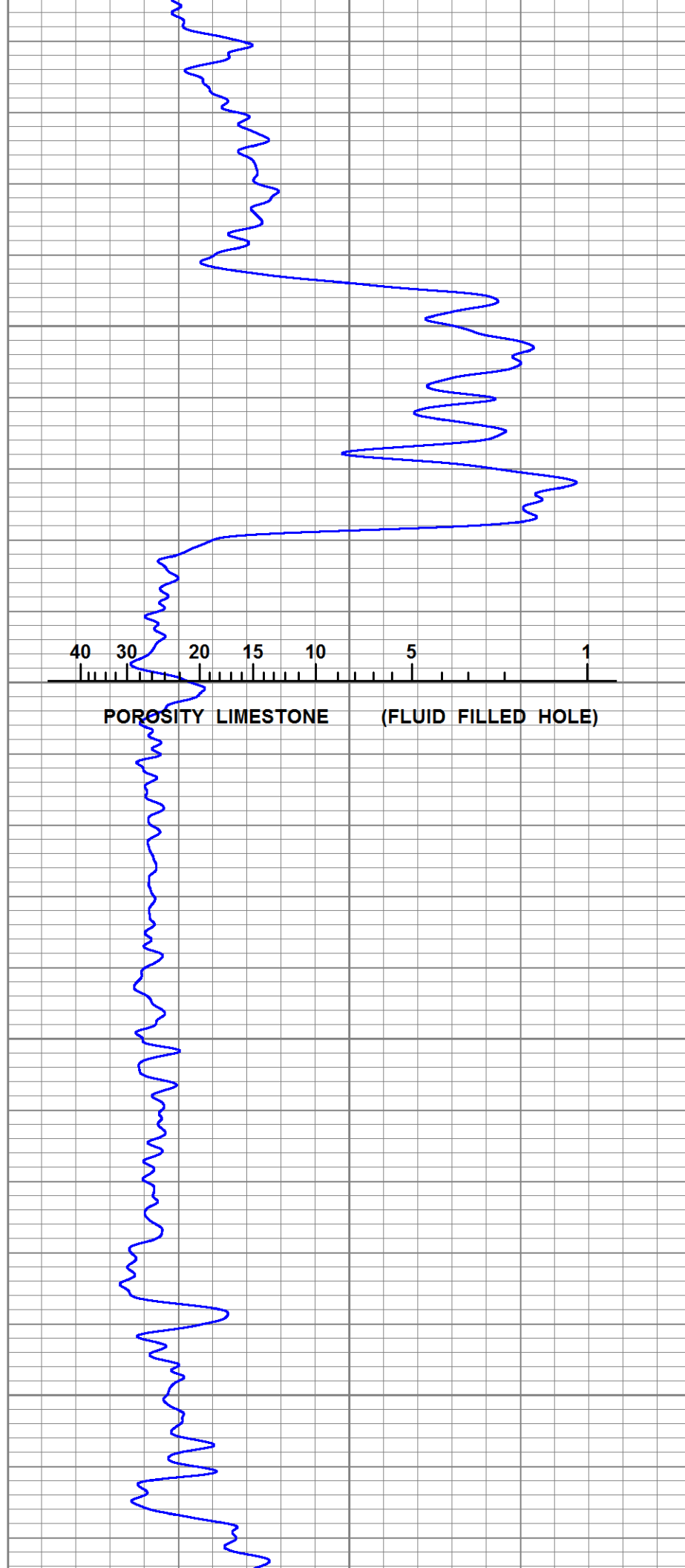
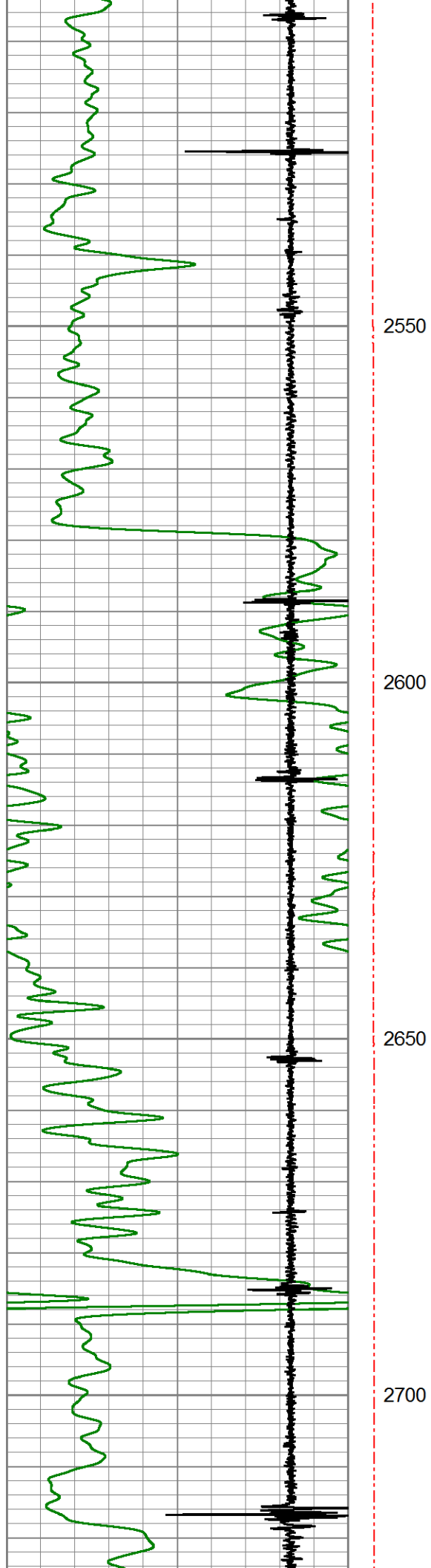
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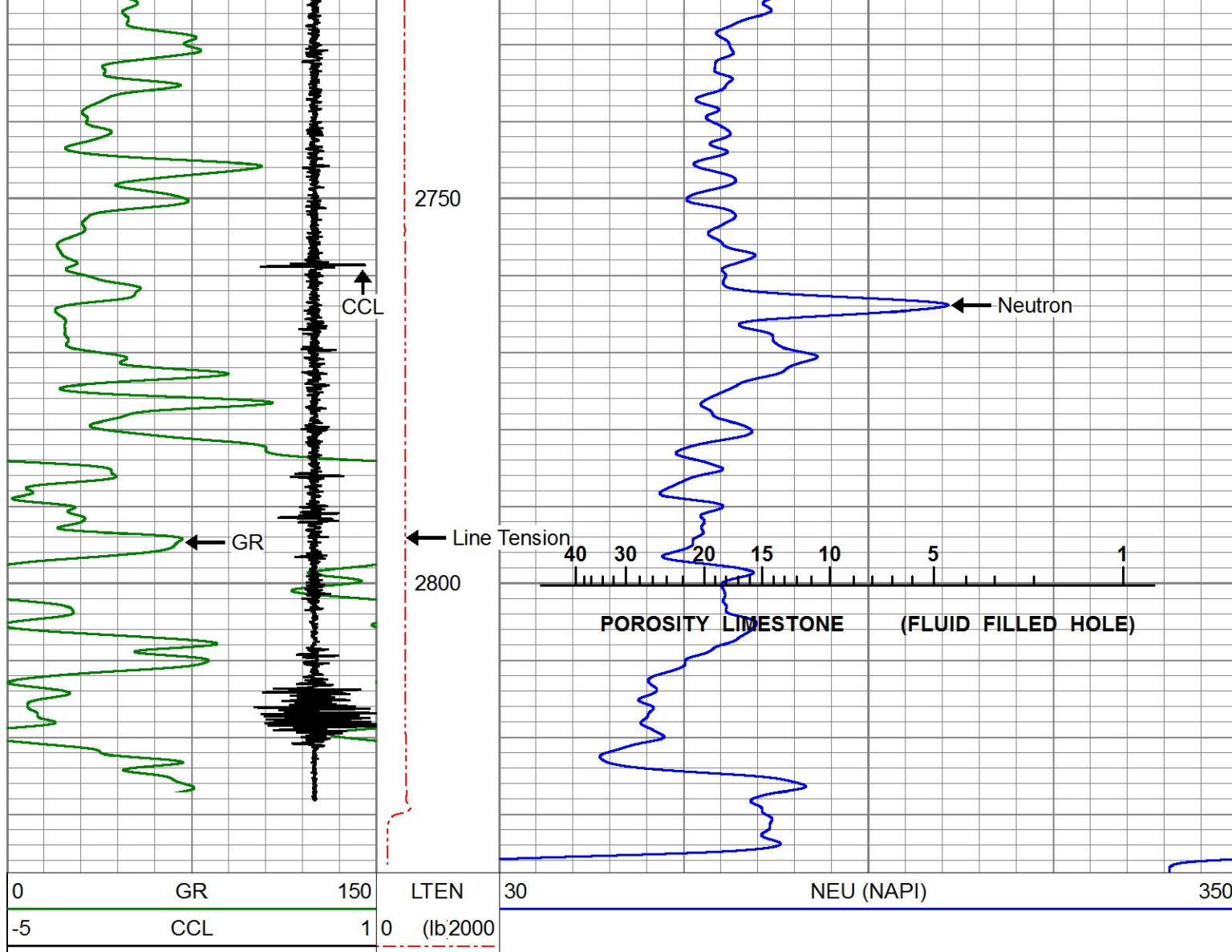
2400

2450

2500







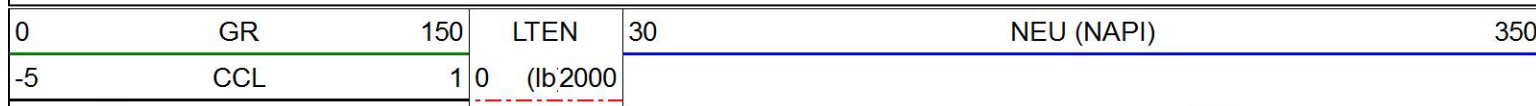


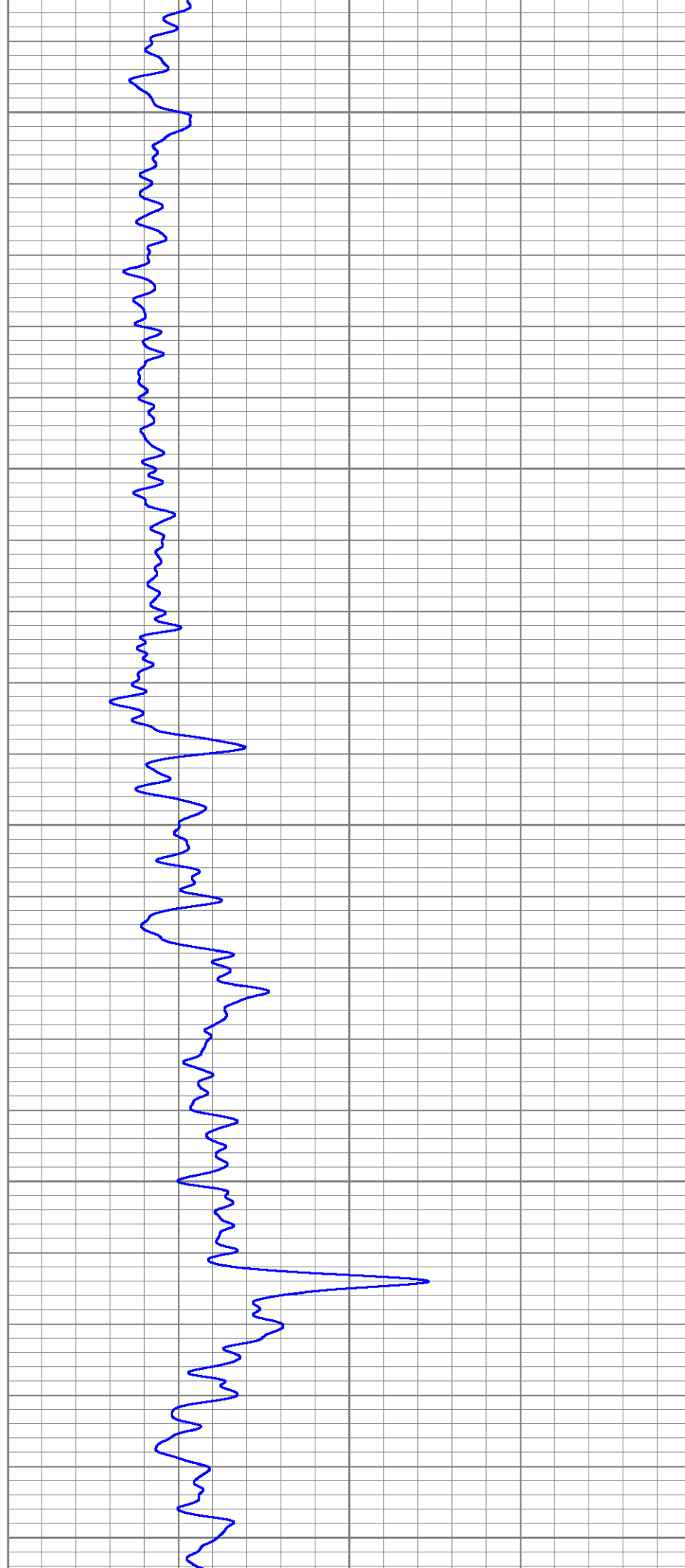
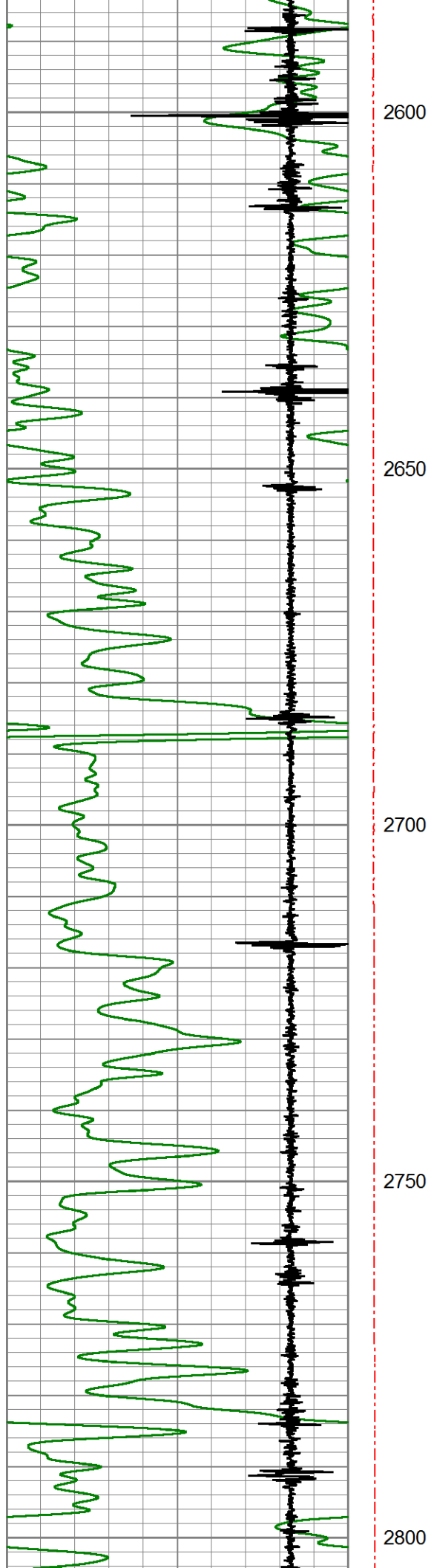
PIONEER
Pioneer Energy Services

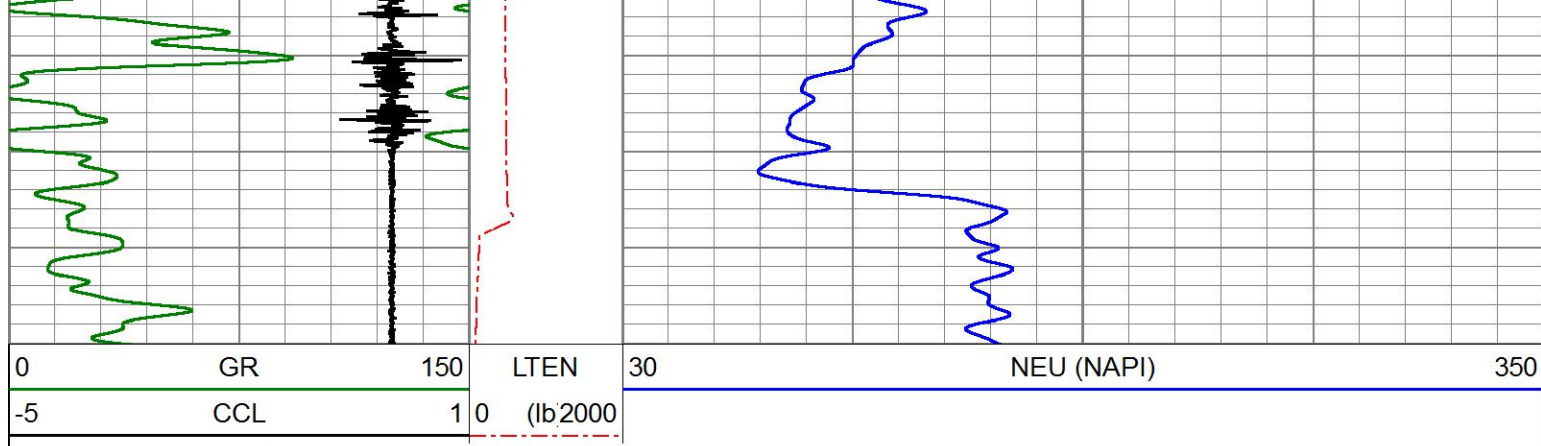
REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

Database File entransco_t_wiebe#31_1swd_cbl_grn.db
 Dataset Pathname cbl1/pass2
 Presentation Format PINR_G~4
 Dataset Creation Mon Dec 17 16:51:06 2018
 Charted by Depth in Feet scaled 1:240







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:

Raw (v)		Calibrated (mv)		Results	
Zero	Cal	Zero	Cal	Gain	Offset
2'	0.003	1.573	0.700	71.921	45.376
					0.550

S	0.003	1.573	0.700	71.921	45.378	0.539
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



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