

Tucker

WIRELINER SERVICES

COMPENSATED NEUTRON PEL DENSITY LOG

Company : LB EXPLORATION, INC. Well : STRONG #1 Field : MEDICINE LODGE-BOGGS County : BARBER State : KANSAS Country : USA API No. : 15-007-23826-0000		File No : TUL-56026 Company : LB EXPLORATION, INC. Well : STRONG #1 Field : MEDICINE LODGE-BOGGS County : BARBER State : KANSAS Country : USA API No : 15-007-23826-0000	
Location : 2310' FSL & 540' FWL E/2 NW NW SW		LSD : Sect : 35 Twp : 32S Rge : 13W	
Permanent Datum:	GL	Elevations:	Services:
Drilling Measured From:	KB	KB 1692.00	CNT
Log Measured From:	KB	DF 1691.00	LDT
Above Permanent Datum:	13.00 Ft	GL 1679.00	MLT
Date	2012-01-17		
Run Number	1		
Depth--Driller	4944.0 Ft		
Depth--Logger	4942.0 Ft		
First Reading	4942.0 Ft		
Last Reading	344.0 Ft		
Casing--Driller	334.0 Ft		
Casing--Logger	344.0 Ft		
Bit Size	7.875 In		
Casing Size	8.625 In		
Hole Fluid Type	WBM		
Density	9.4 LBS/GAL		
Fluid Loss	8.8 CC		
PH/Viscosity	10.0	52.0 SEC	
Sample Source	MEASURED		
RMF@Measured Temp.	10.000 @ 55 F		
RMF@Measured Temp	8.000 @ 55 F		
RMF@Measured Temp.	12.000 @ 55 F		
Source RMF/RMC	CALCULATED/CALCULATED		
RM@BHT	4.500 @ 130 F		
Time Circulation Stopped	2012-01-17 09:26		
Max Recorded Temp.	130 F		
Equipment/Base	TRK 127 TULSA		
Recorded By	S. TYLER B. BAILEY		
Witnessed By	S. PETERMANN		

The customer is hereby warned that by providing the log data herein, T. W. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. W. S. does not guarantee or warrant either expressly or impliedly, the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by T. W. S. personnel. Any interpretation, conversion or recommendation is not part of the consideration for the agreement between the parties and is not part of any part of the charge by T. W. S. for its services. Any user of the log data is warned that said user is not entitled to rely on interpretations, conversions or recommendations as aforesaid.

Bitsize Intervals		Casing Strings		
Size (In)	Bottom (Ft)	Size (In)	Weight (Lbs)	Bottom (Ft)
7.875	4944.00	8.625	32.00	334.00

Run Number	1	
Date	2012-01-17	
Date/Time On Bottom	2012-01-17 11:26	
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	3.600 @ 130 F	
RMC@BHT	5.400 @ 130 F	

Run Number 1

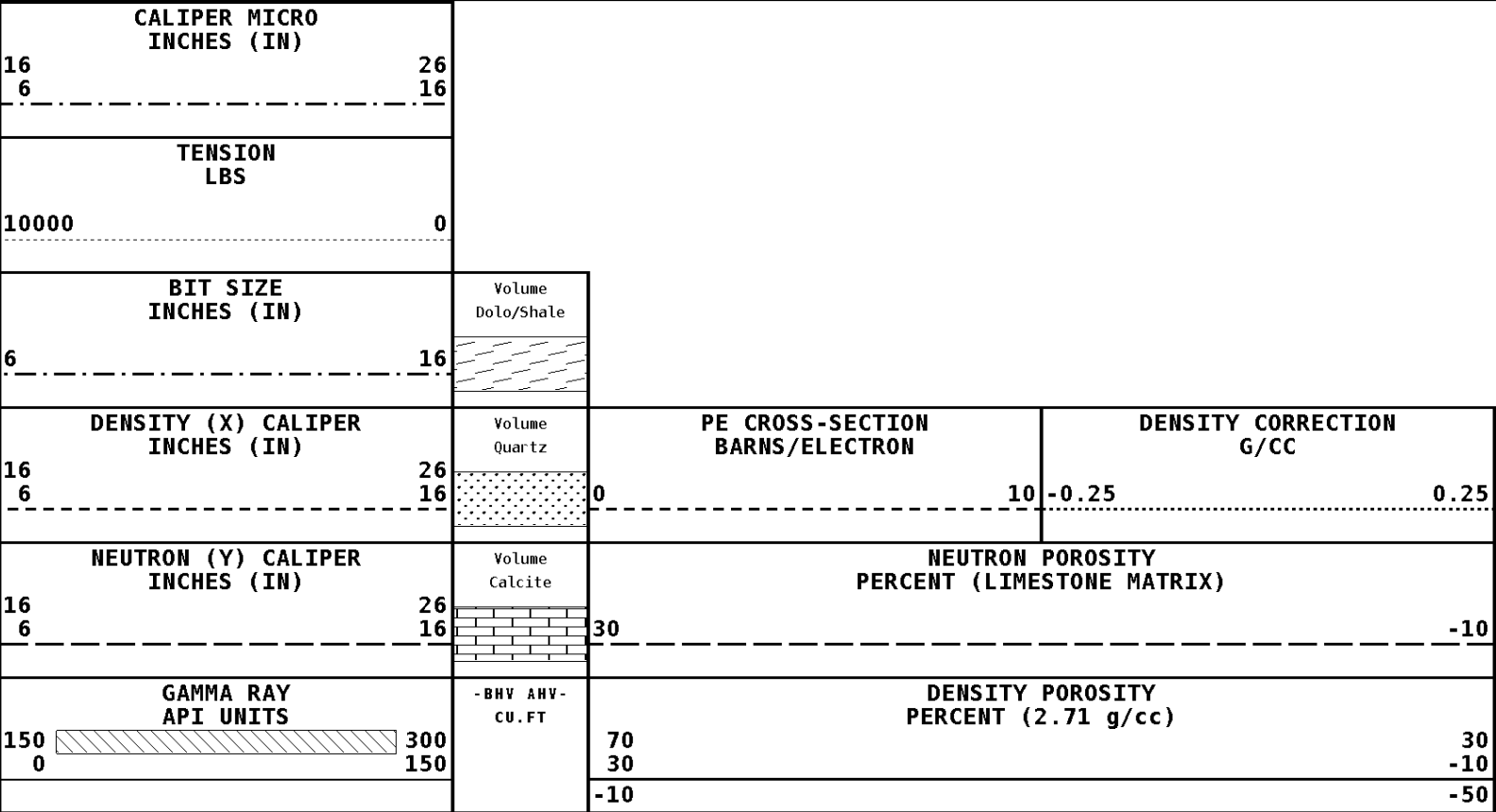
Comments

ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, MLT, CST AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED UISING 5.500" PRODUCTION CASING.

GRT: GRP.
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 MLT: NOR_RF, INV_RF, MSCLPIN.
 CST: PORS, DDCDTE, TT1PF, TT3PF, ITT.
 PIT: ILD, ILM, SPU, SFLAEC

OPERATORS:
 J.T.
 M.BURKE

Well File: LB_EXPOR STRONG 1 JAN17_QST-SGT	Scale: 1:240
Segment: V8.D1.S2 Reprocess MAIN	Acquired: Not Available
Reference: 0	Processed: 2012-01/17 21:47 3.2.0-10367



1:240 MAIN SECTION

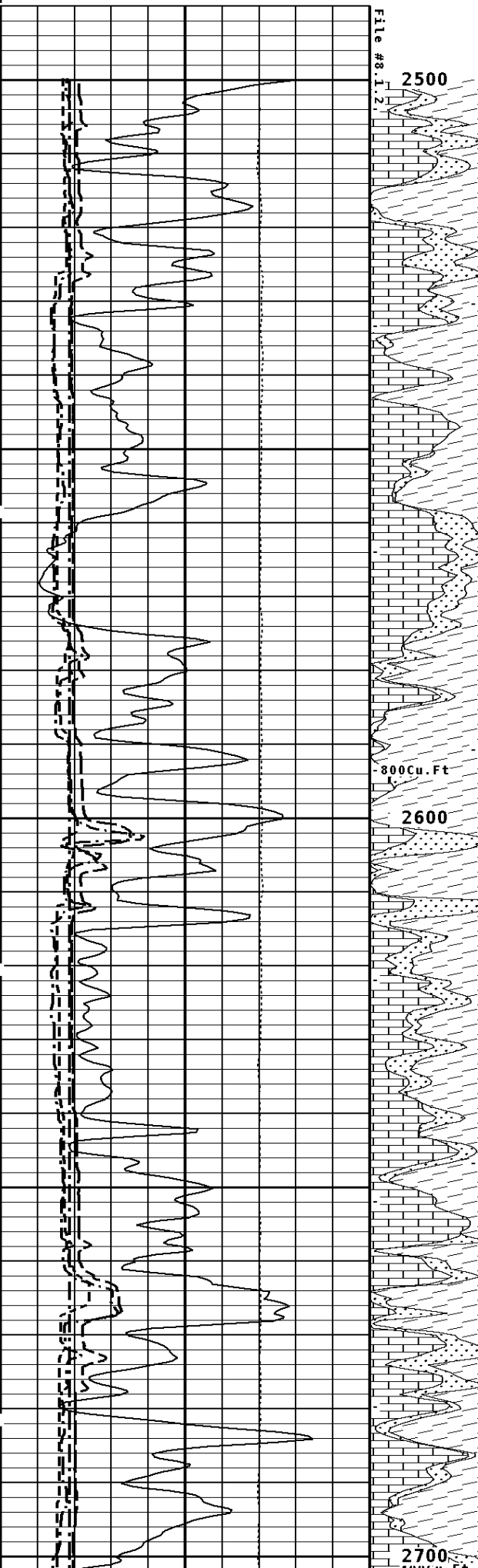
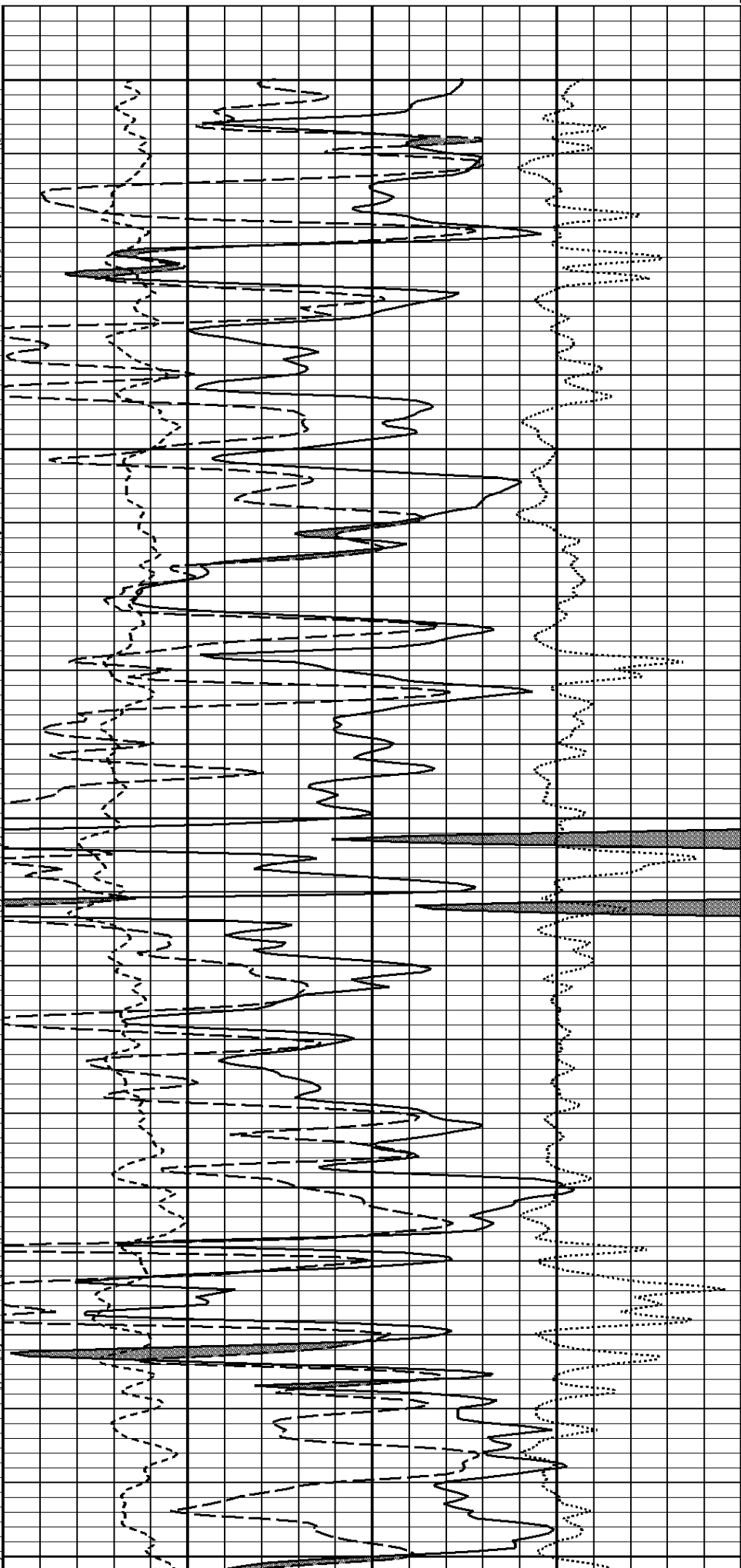
File #8.1.2

2500

800Cu.Ft

2600

2700



4000 Cu. Ft.

2800

700 Cu. Ft.

2900

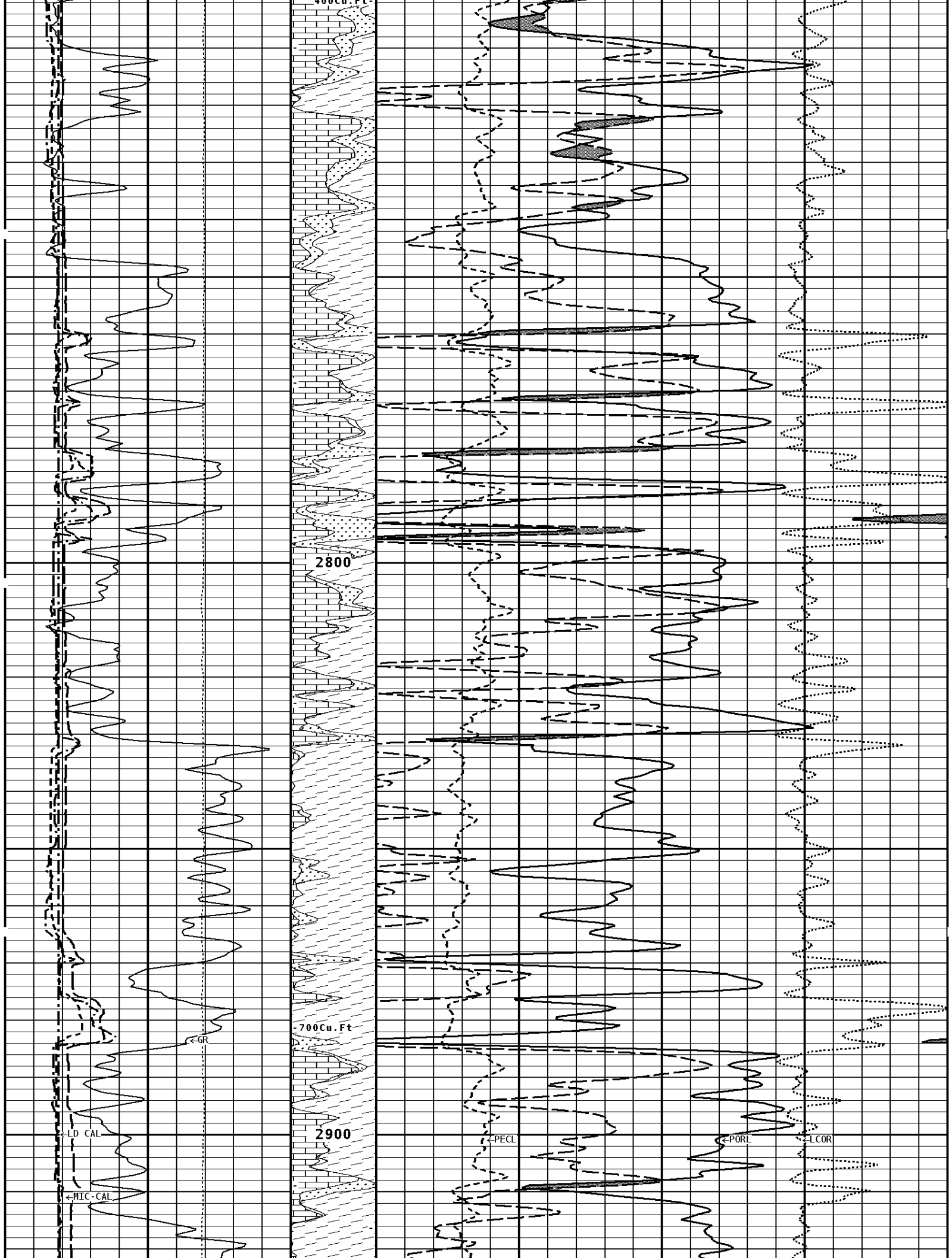
LD CAL

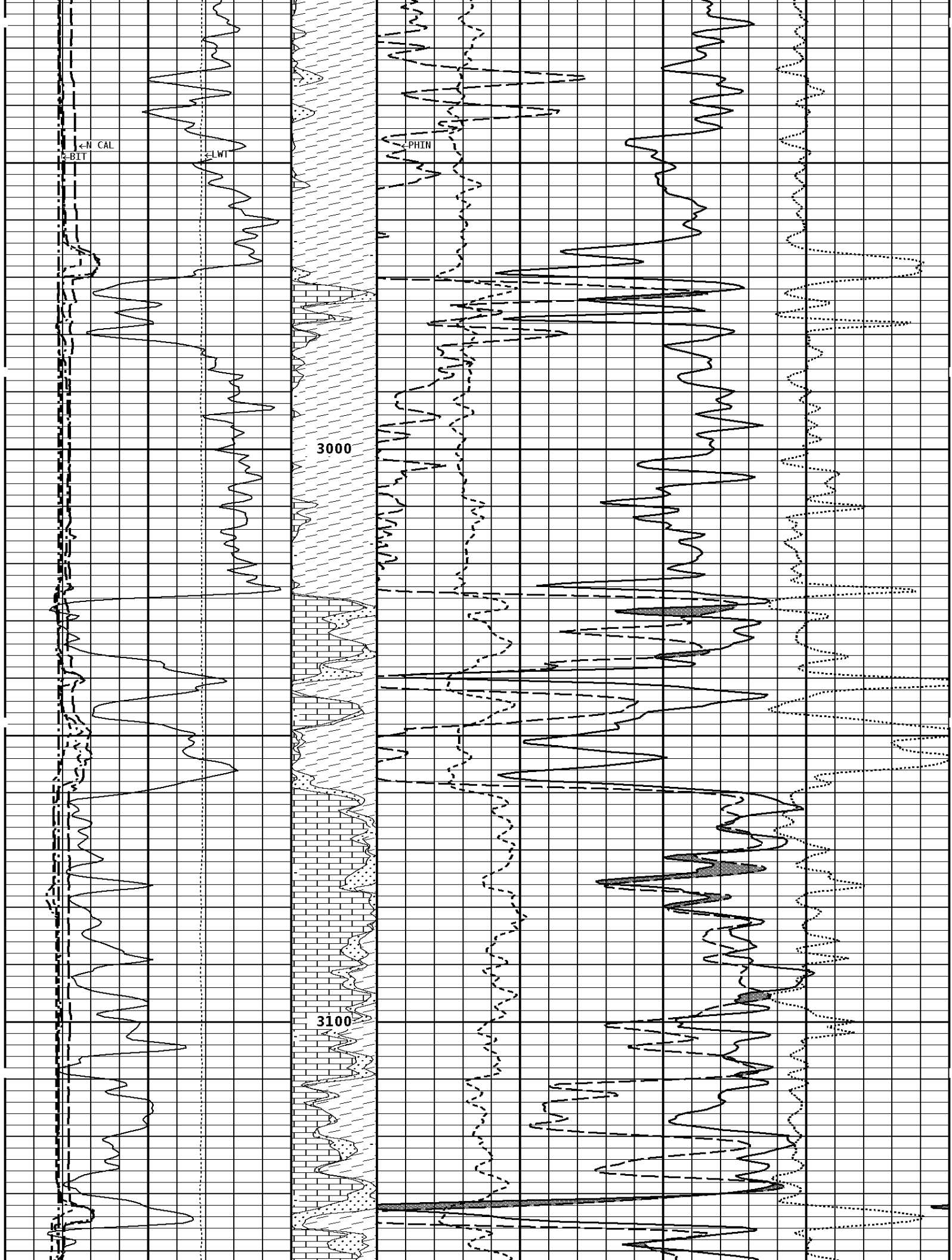
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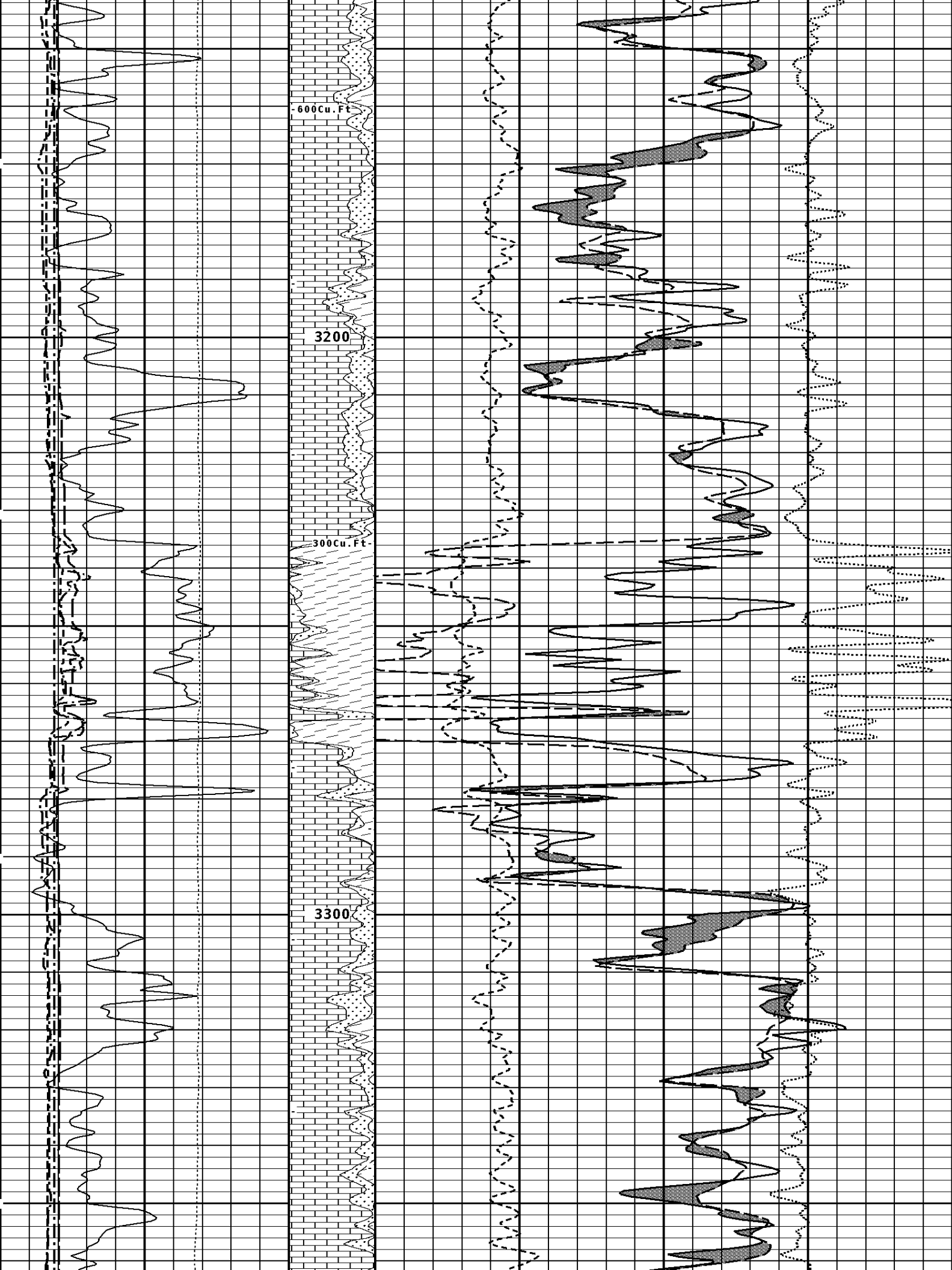
← PECL

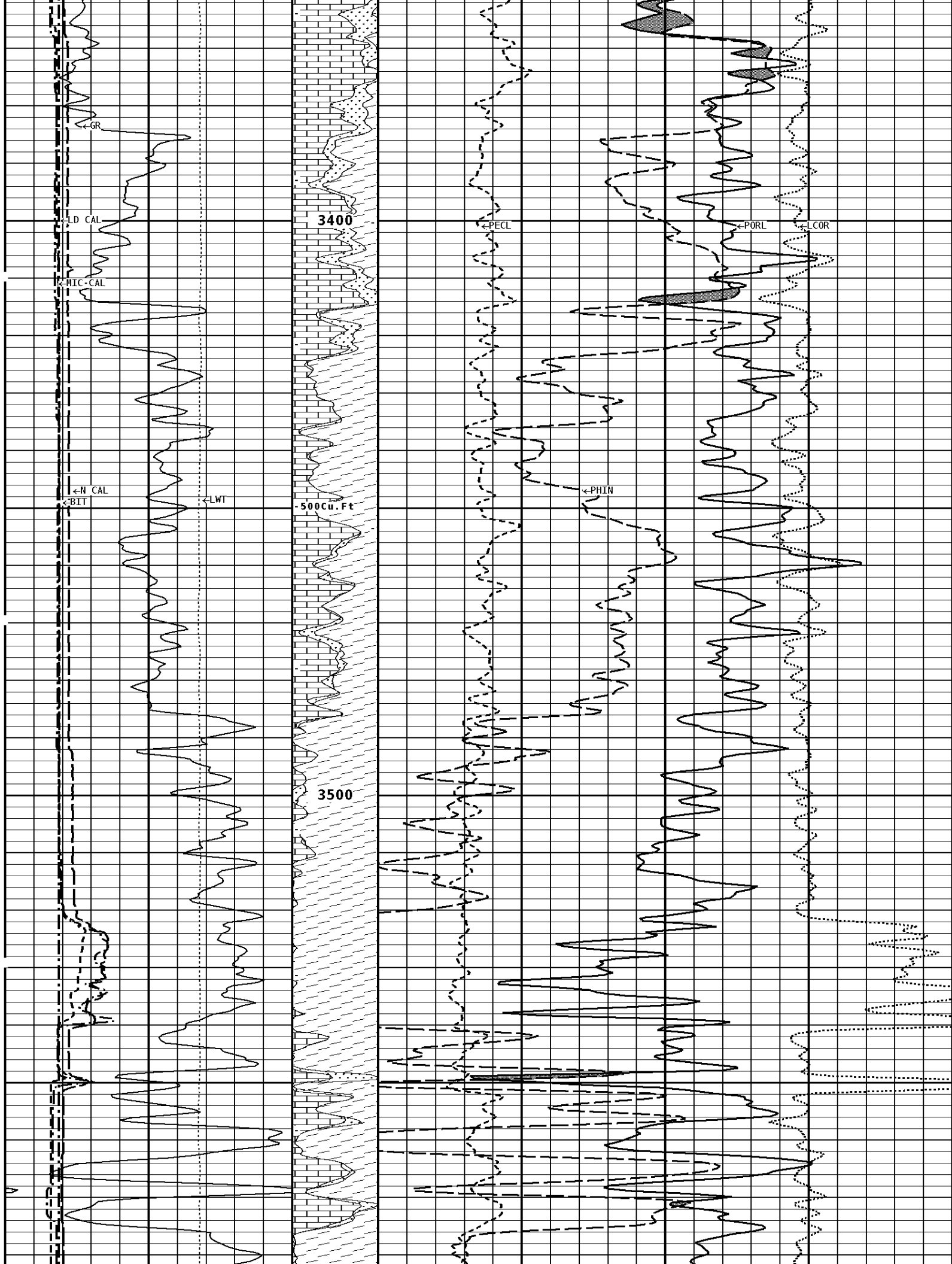
← PORL

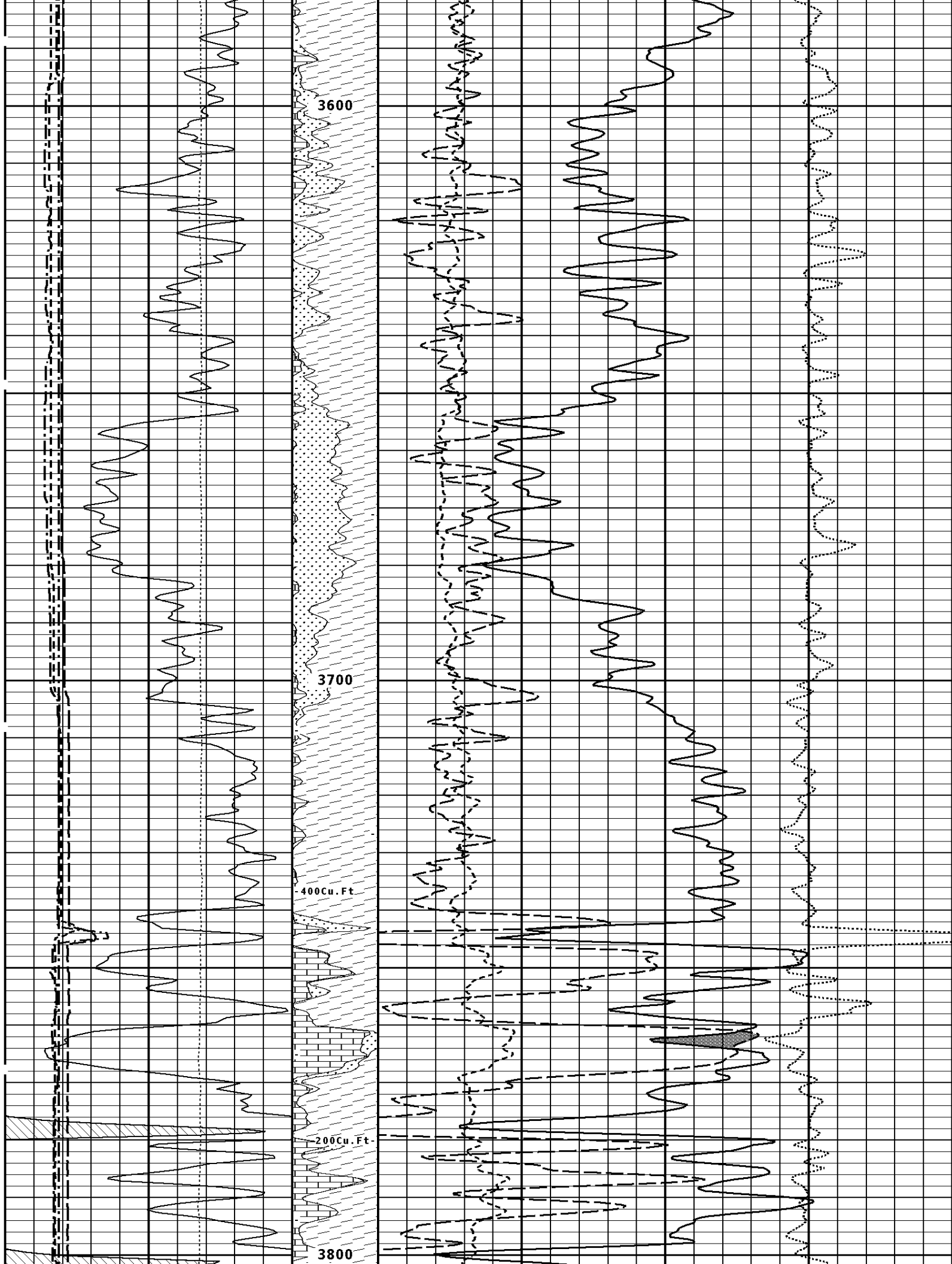
← LCOR

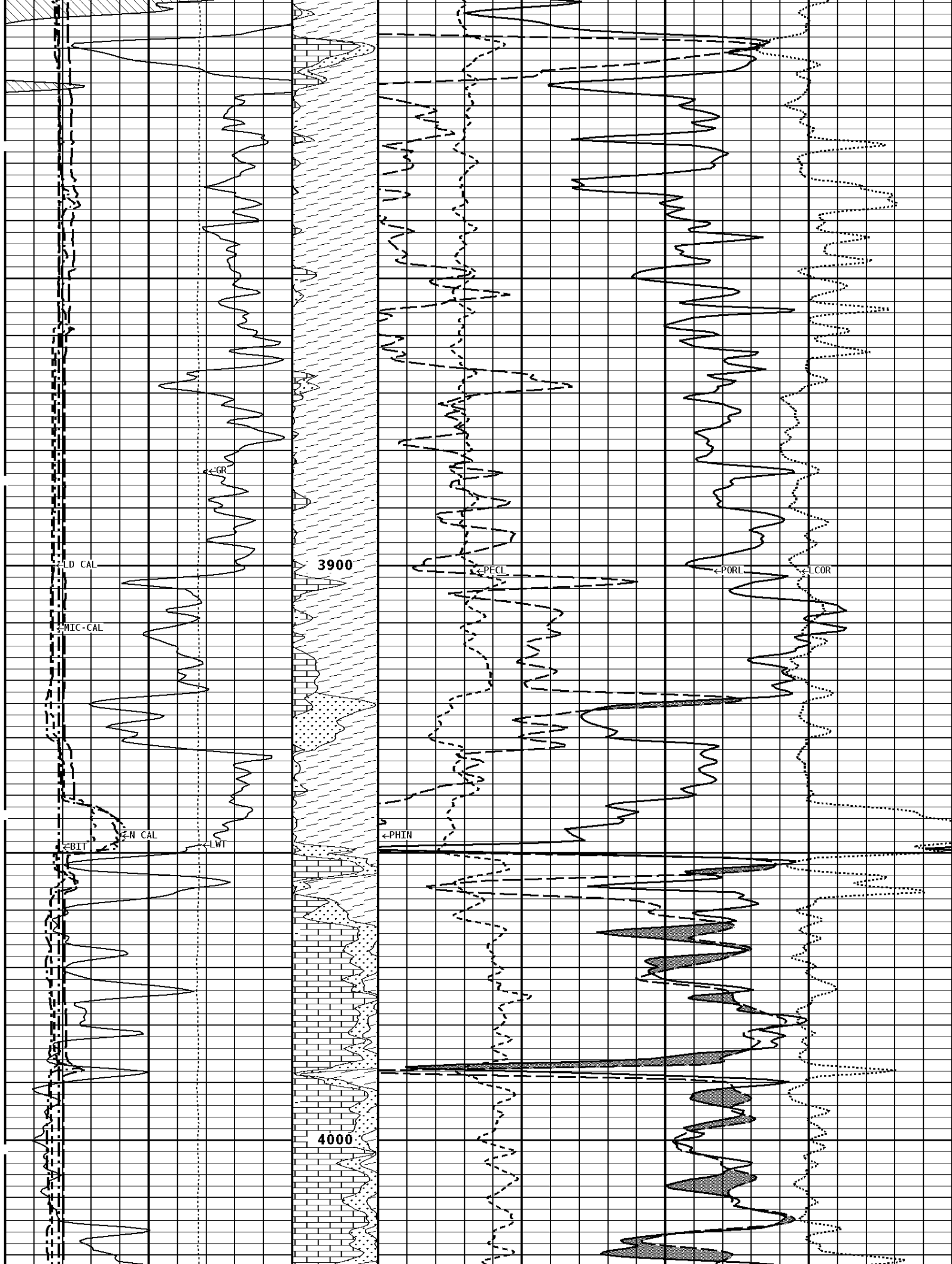








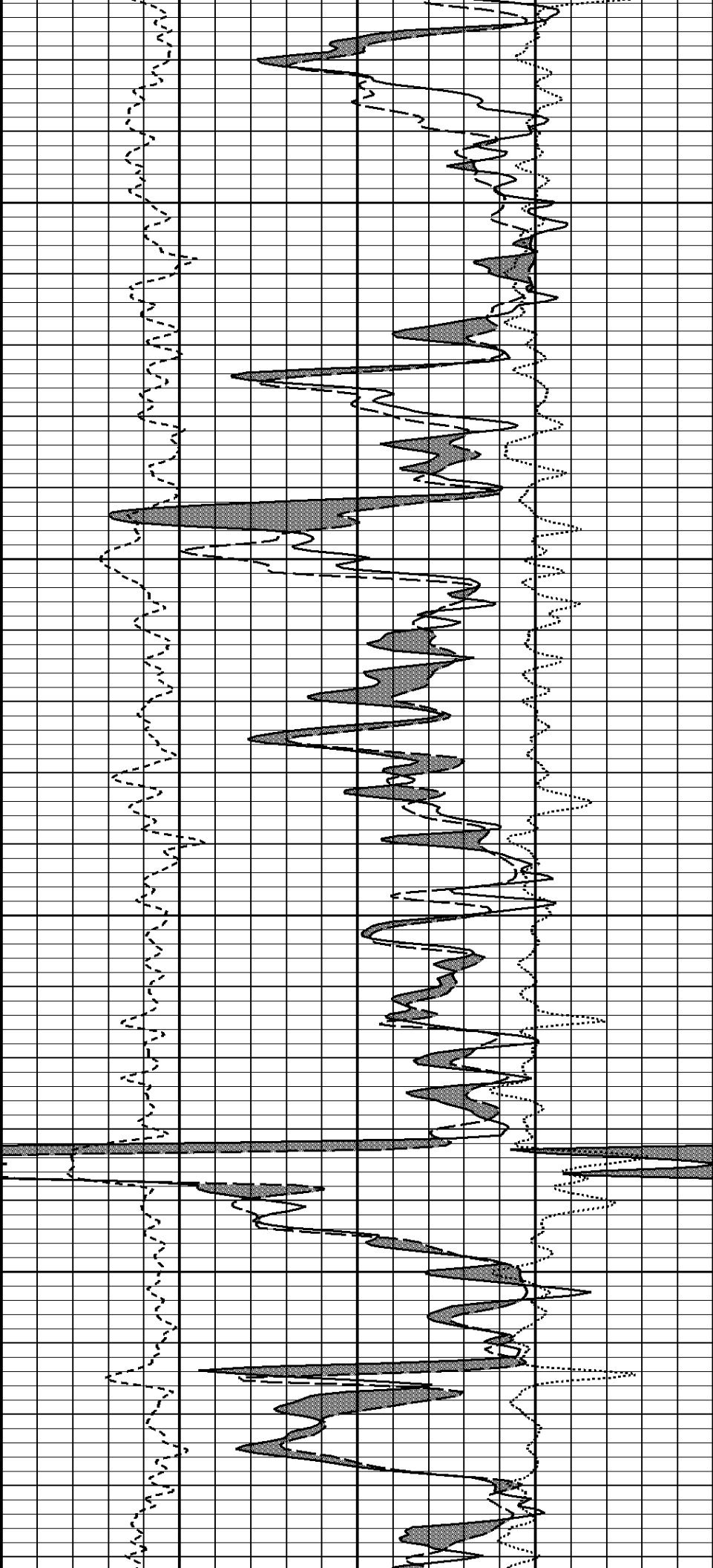


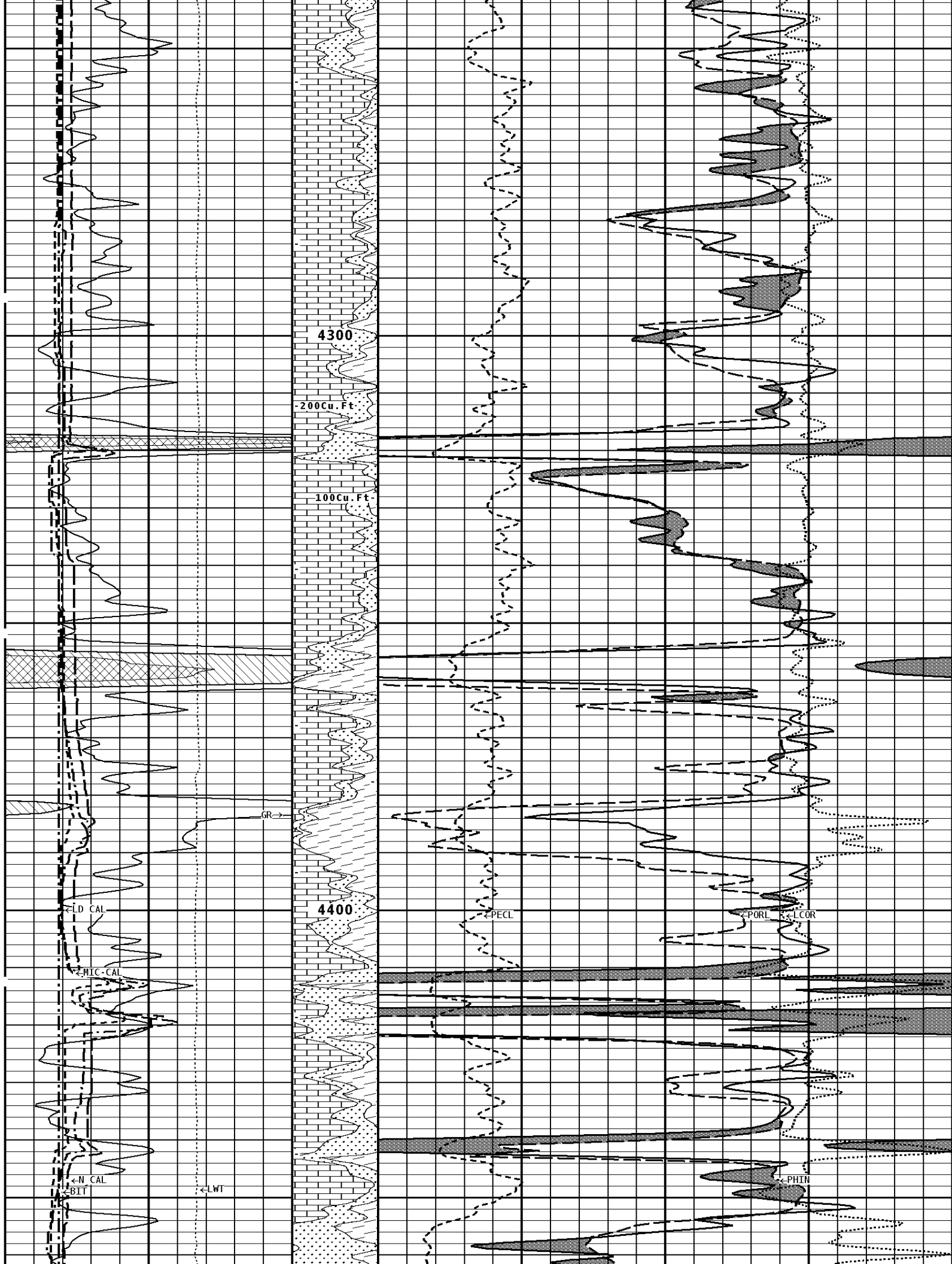


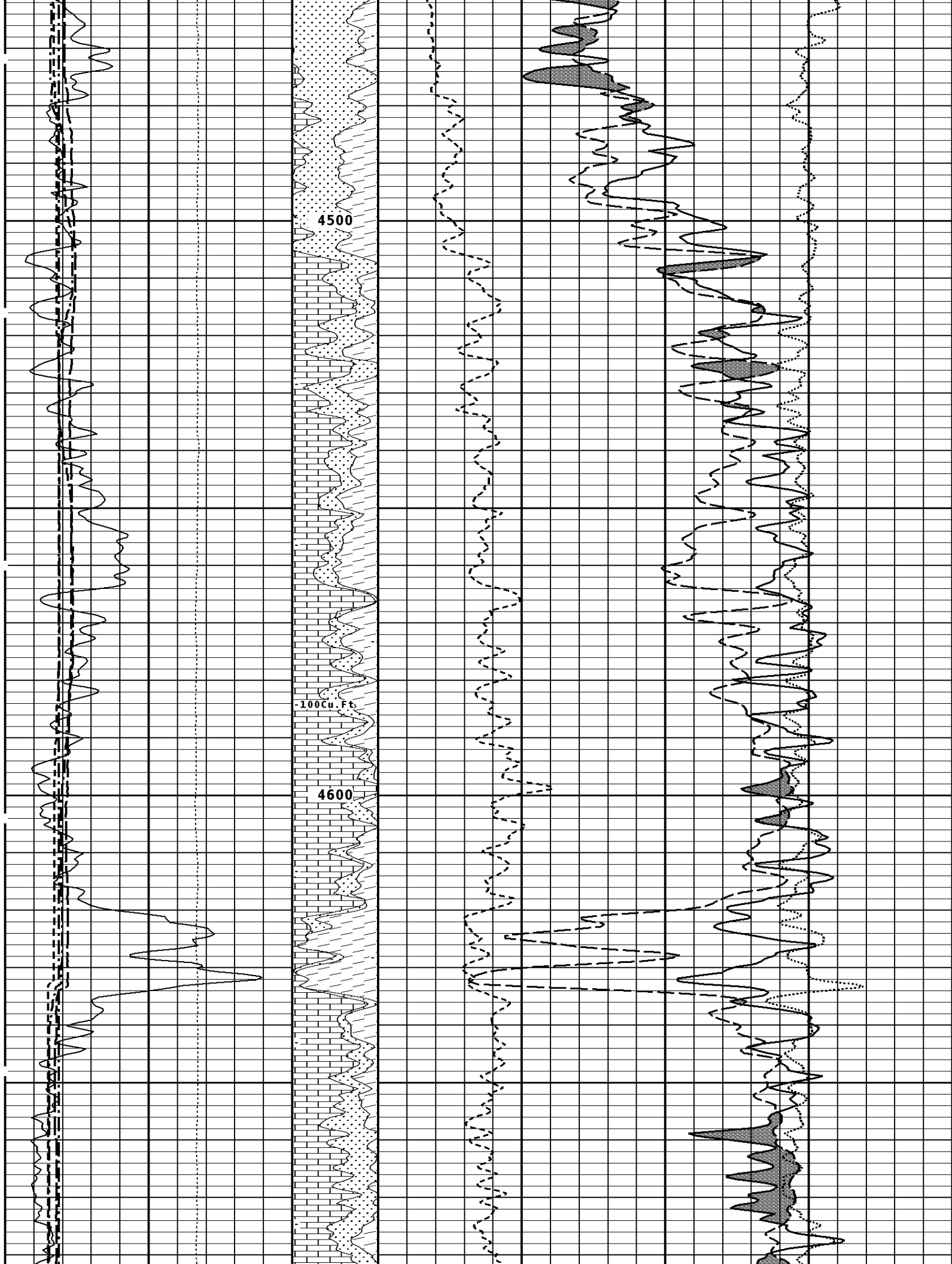
300Cu.Ft

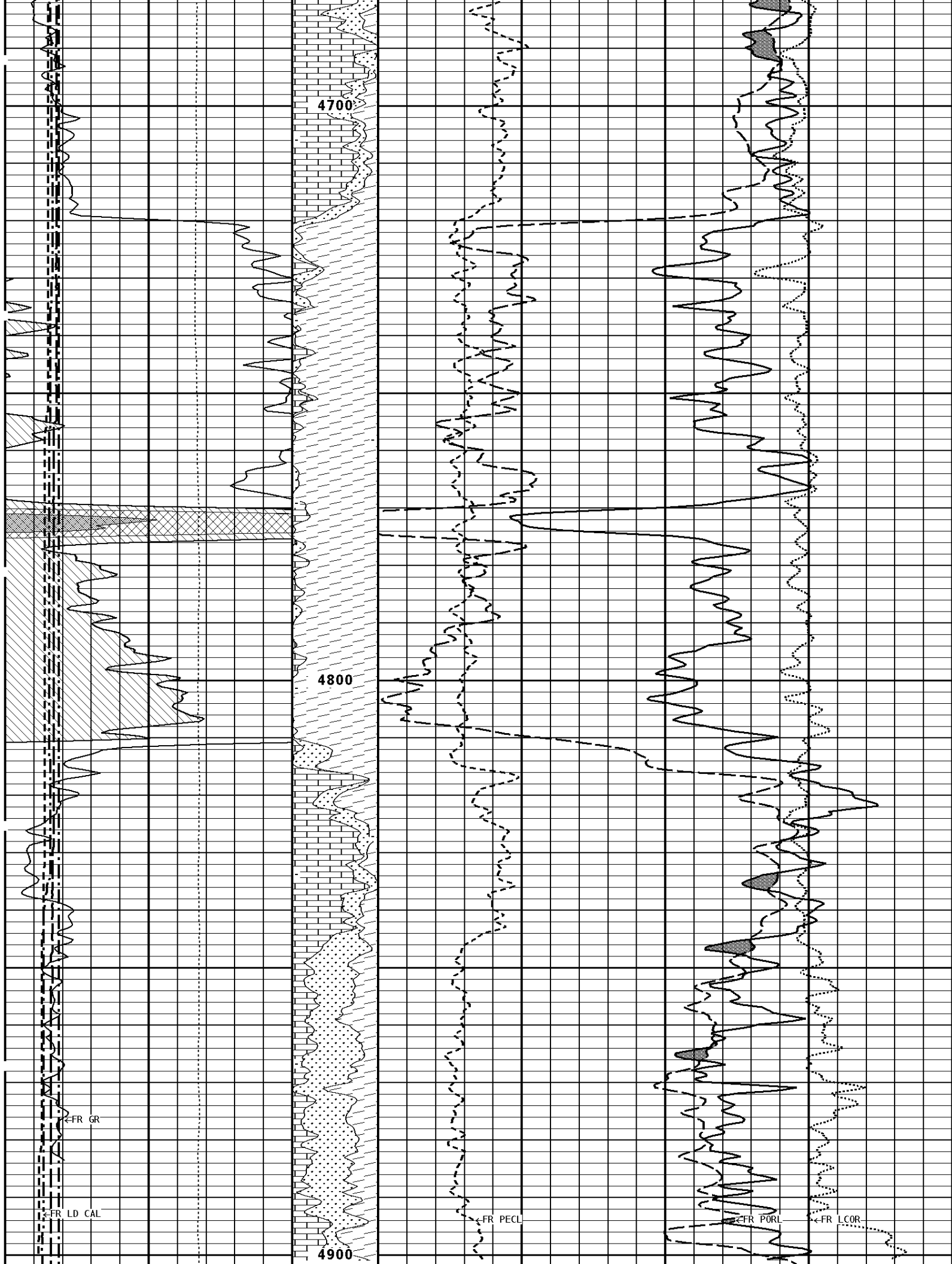
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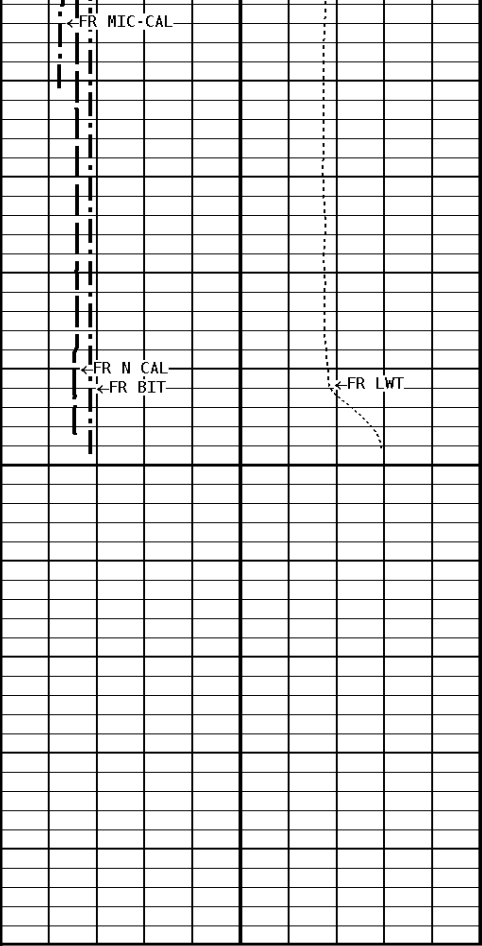
4200





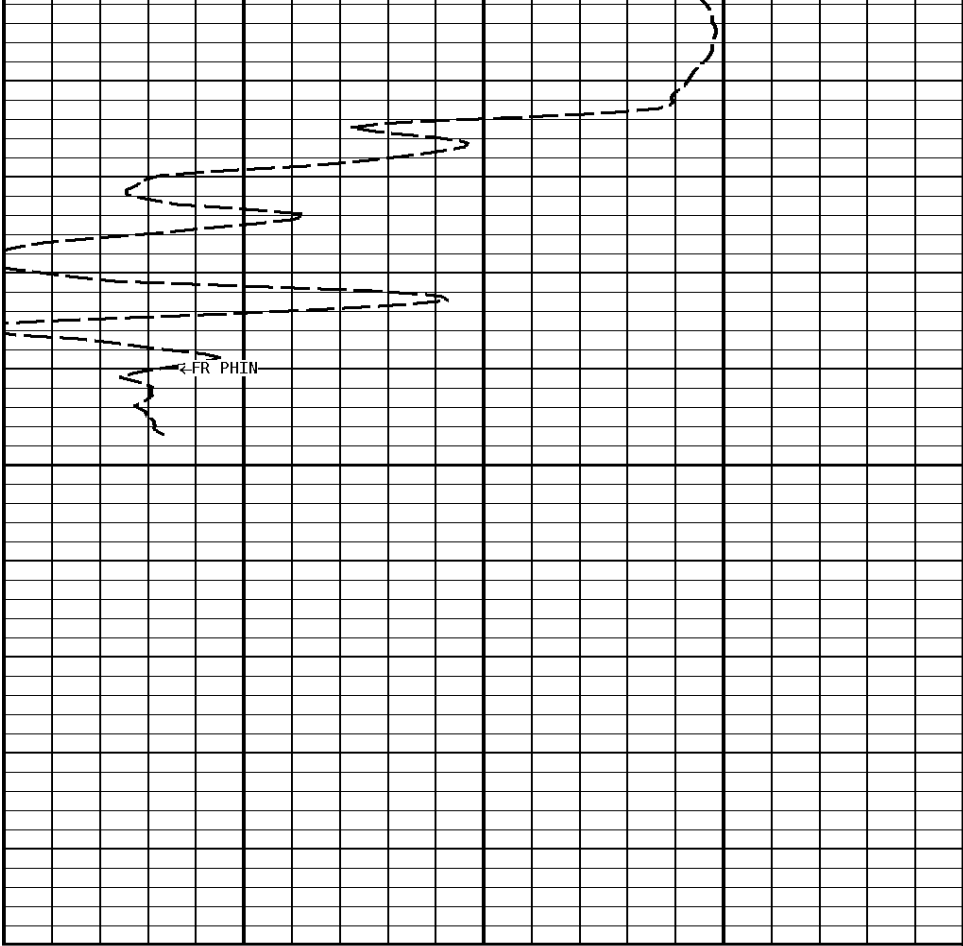






4942

File #8.1.2



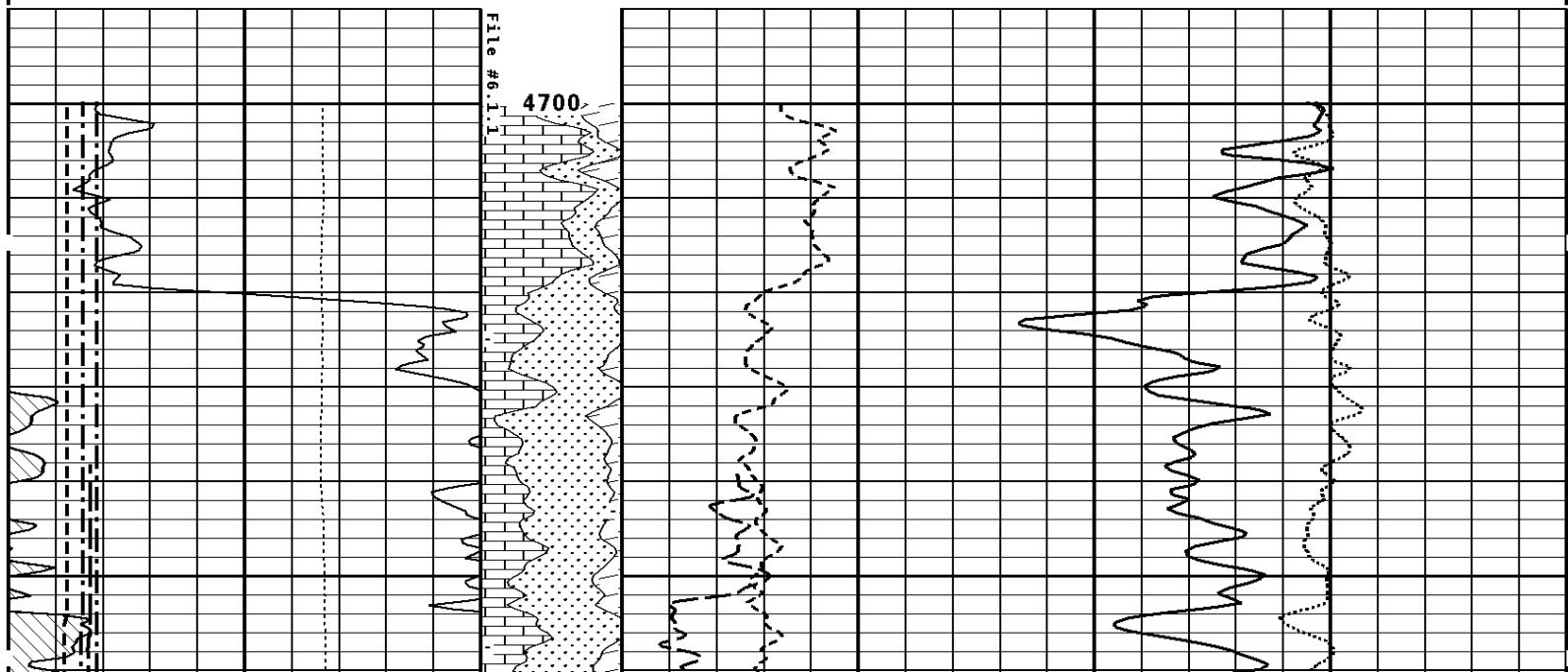
1:240 MAIN SECTION

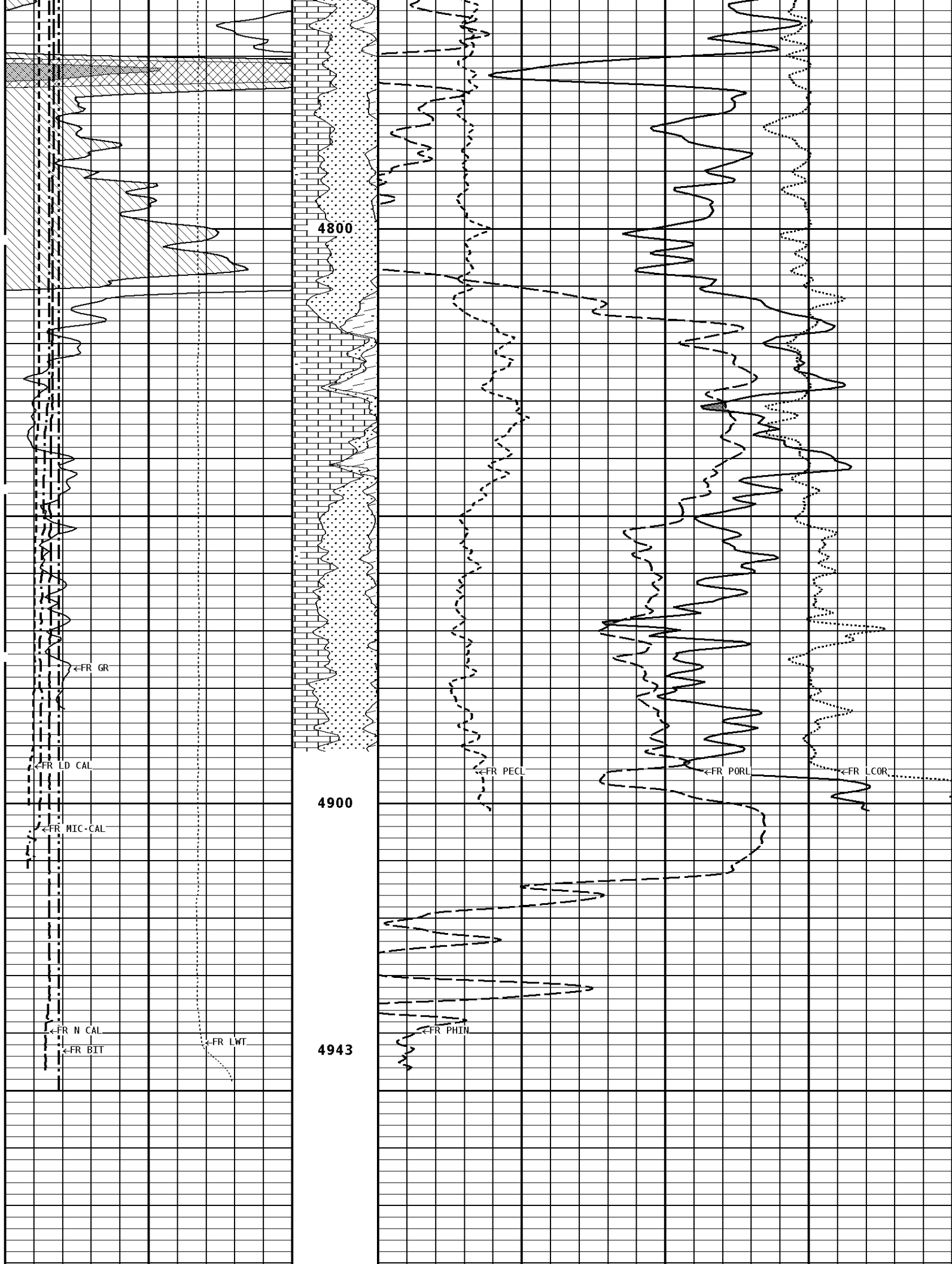
GAMMA RAY API UNITS		- BHV AHV - CU.FT	DENSITY POROSITY PERCENT (2.71 g/cc)	
150	300		70	30
0	150		30	-10
			-10	-50
NEUTRON (Y) CALIPER INCHES (IN)		Volume Calcite	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)	
16	26		30	-10
6	16			
DENSITY (X) CALIPER INCHES (IN)		Volume Quartz	PE CROSS-SECTION BARN/ELECTRON	DENSITY CORRECTION G/CC
16	26		0	10
6	16		-0.25	0.25
BIT SIZE INCHES (IN)		Volume Dolo/Shale		
6	16			
TENSION LBS				
10000	0			
CALIPER MICRO INCHES (IN)				
16	26			
6	16			

Matrix Density	2.71	g/cc
Fluid Density	1.00	g/cc
Formation Matrix	Limestone	
Drill Bit Size	7.875	in
Casing Diameter	5.500	in
Casing Correction (PHI N)	Disable	

Processed: Not Available

1:240 REPEAT SECTION





[illegible][illegible]

GAMMA RAY API UNITS 150 0 300 150		- BHV AHV - CU. FT	DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 -10 -50	
NEUTRON (Y) CALIPER INCHES (IN) 16 6 26 16		Volume Calcite 	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 -10	
DENSITY (X) CALIPER INCHES (IN) 16 6 26 16		Volume Quartz 	PE CROSS-SECTION BARN/ ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
BIT SIZE INCHES (IN) 6 16		Volume Dolo/Shale 		
TENSION LBS 10000 0				
CALIPER MICRO INCHES (IN) 16 6 26 16				

TENSION LBS 10000 0				
BIT SIZE INCHES (IN) 6 16				
DENSITY (X) CALIPER INCHES (IN) 16 26 6 16			PE CROSS-SECTION BARNs/ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN) 16 26 6 16			DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 30 -10 -10 -50	
GAMMA RAY API UNITS 150 300 0 150			-BHV AHV- CU.FT	COMPENSATED BULK DENSITY G/CC 3.0 4.0 2.0 3.0 1.0 2.0

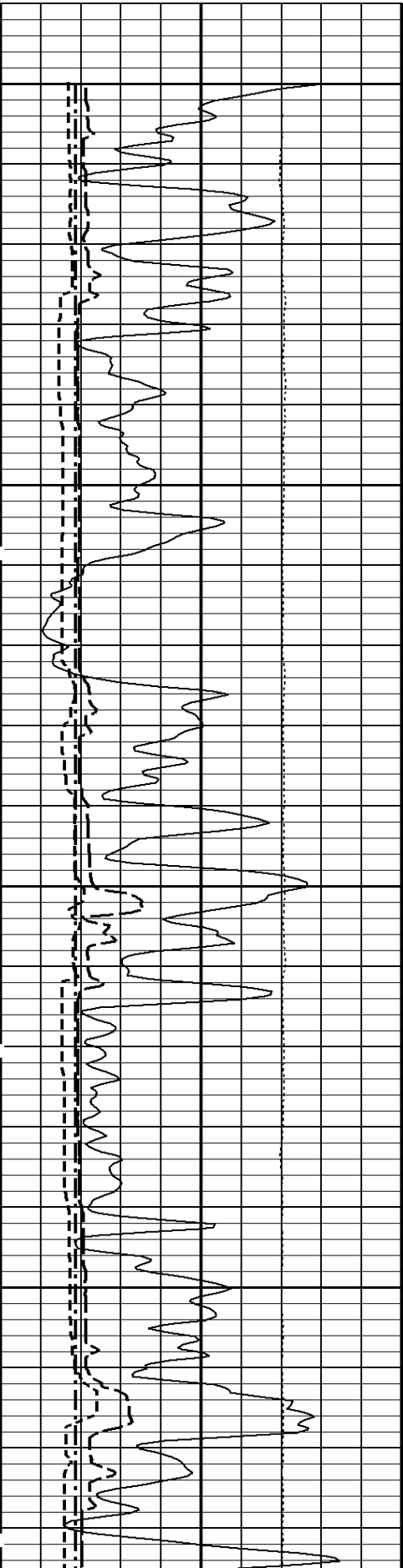
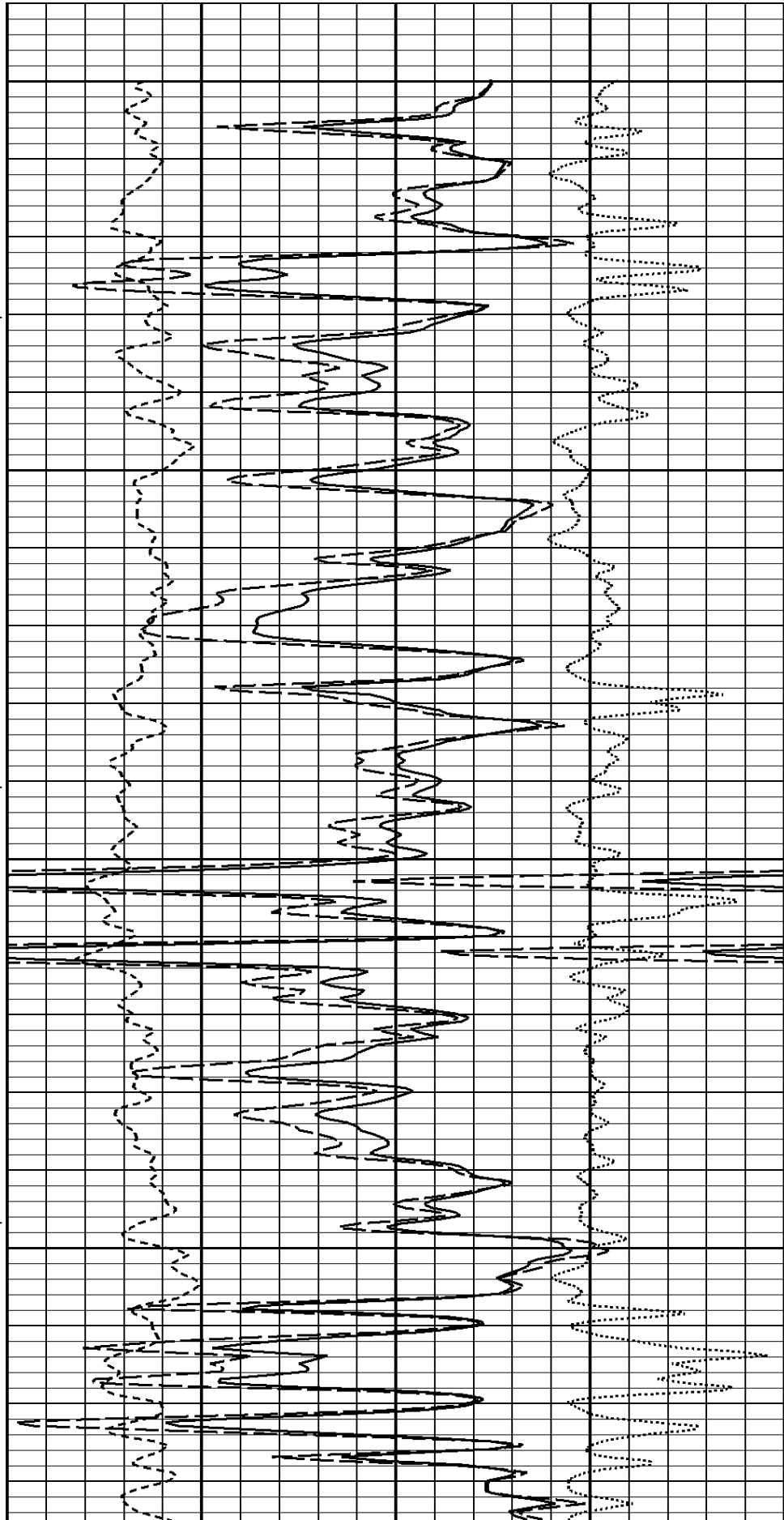
1:240 MAIN SECTION BULK DENSITY

File #8.1.2.

2500

--800Cu. Ft

2600

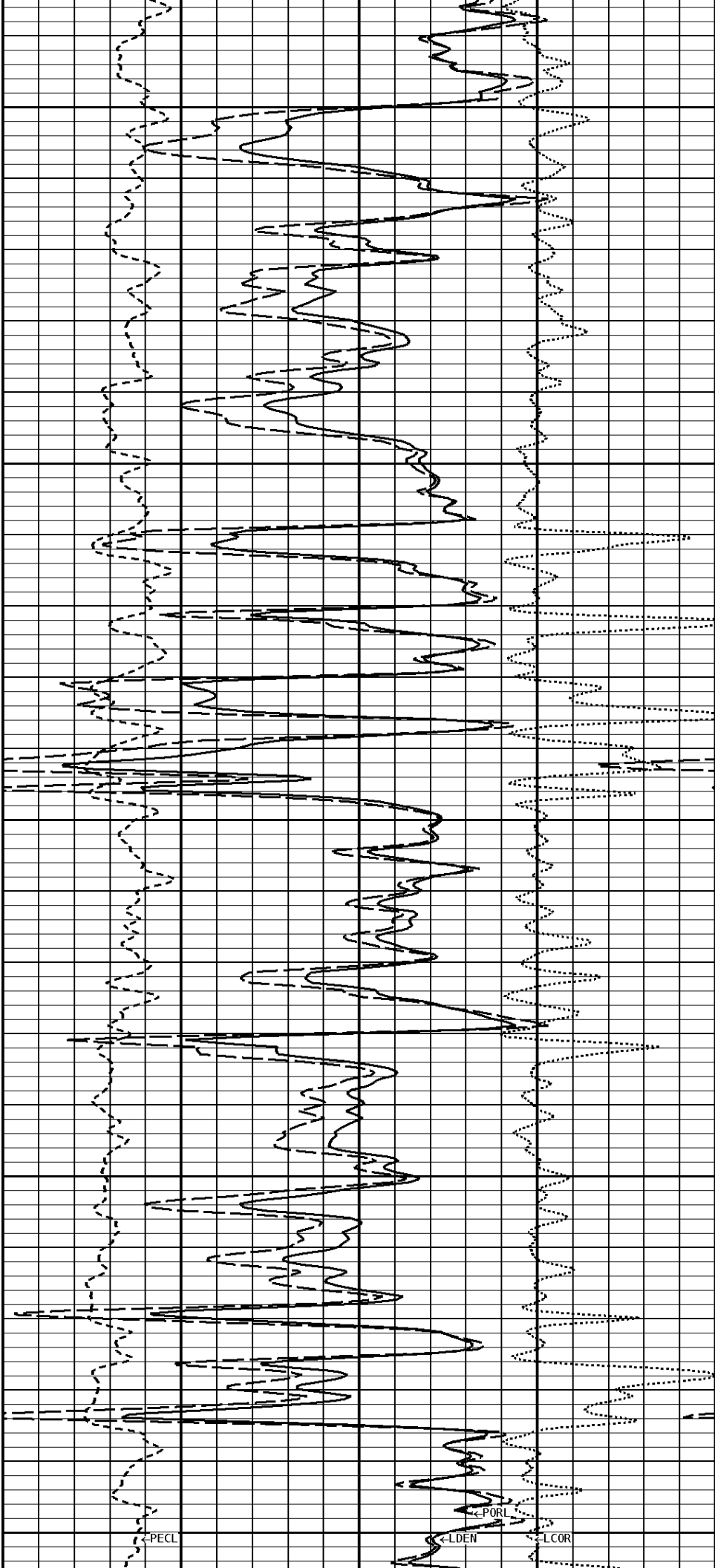
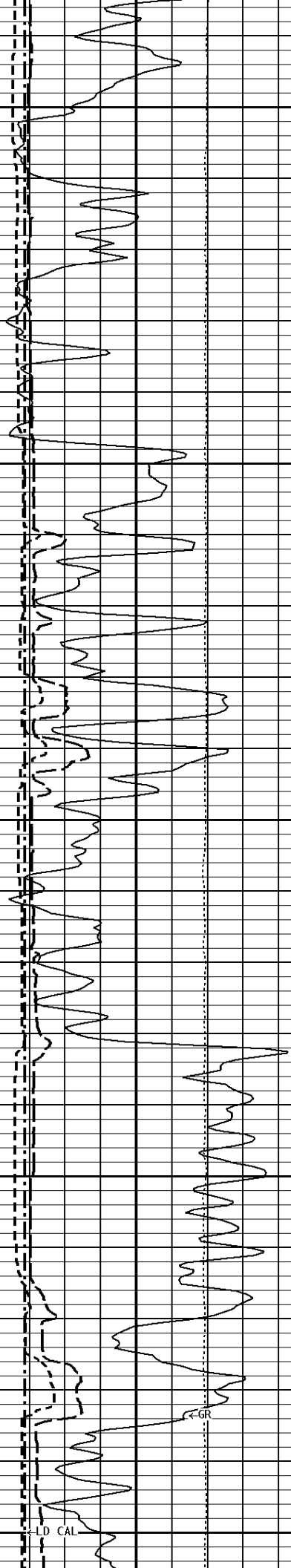


2700
400Cu.Ft--

2800

--700Cu.Ft

2900



LD CAL

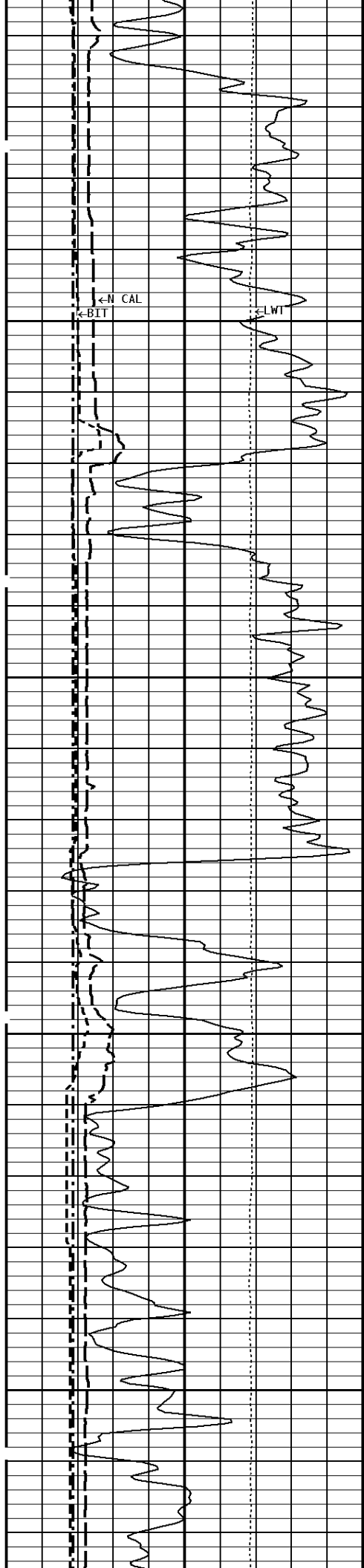
CGR

PECL

PCORL

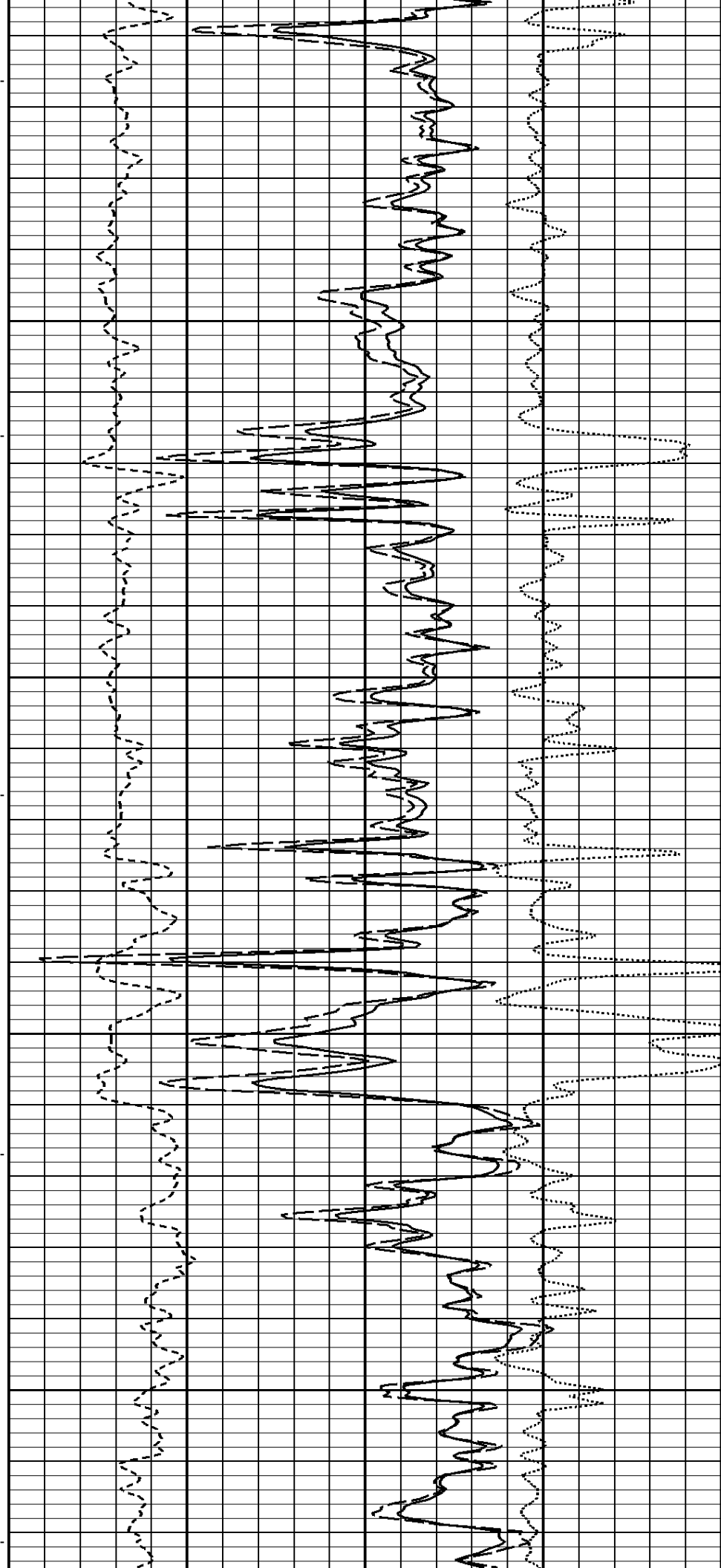
LDEN

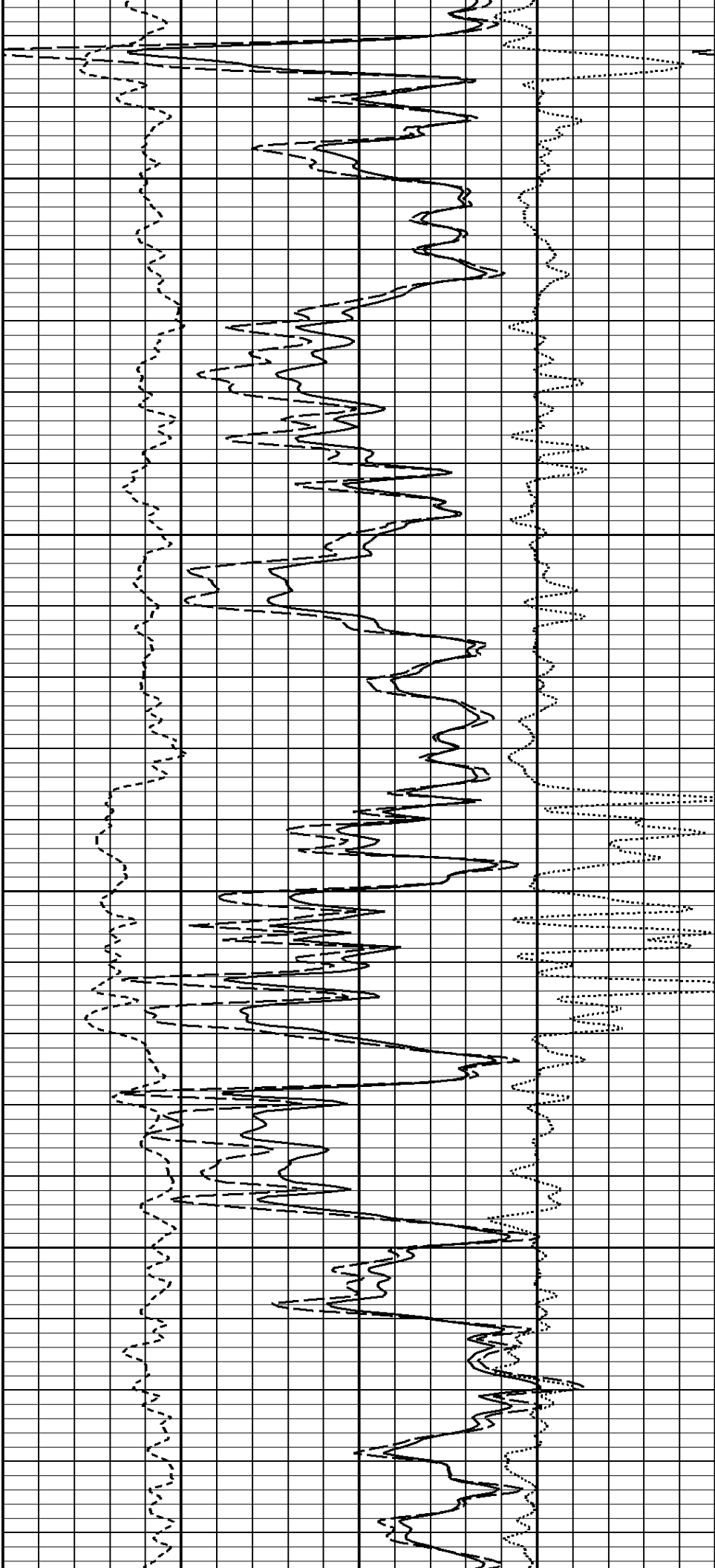
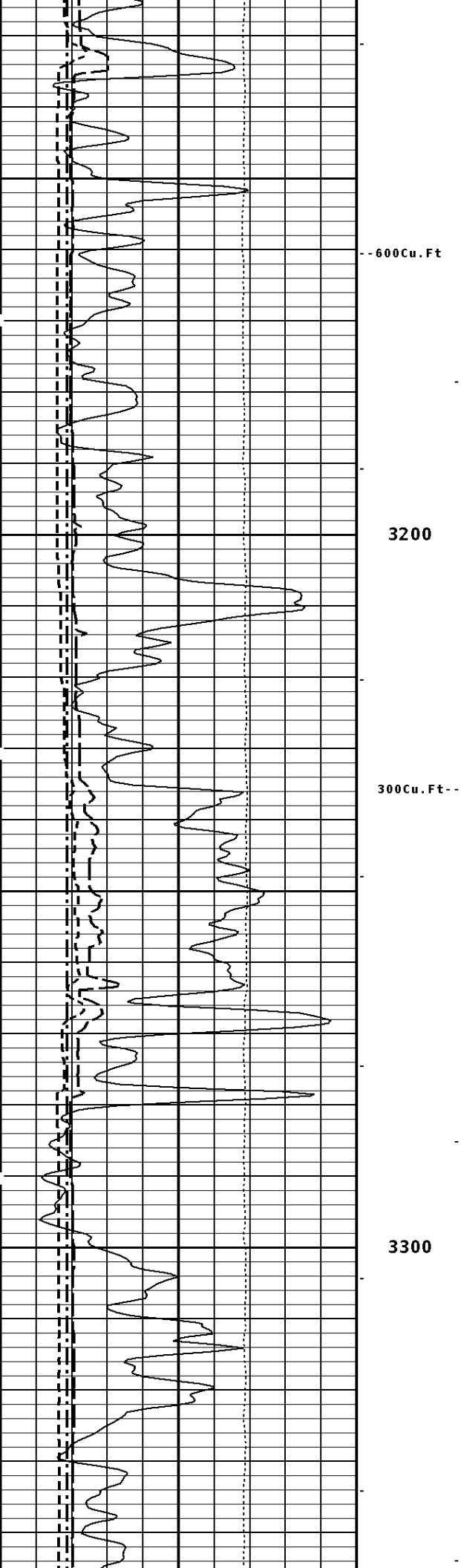
LCOR

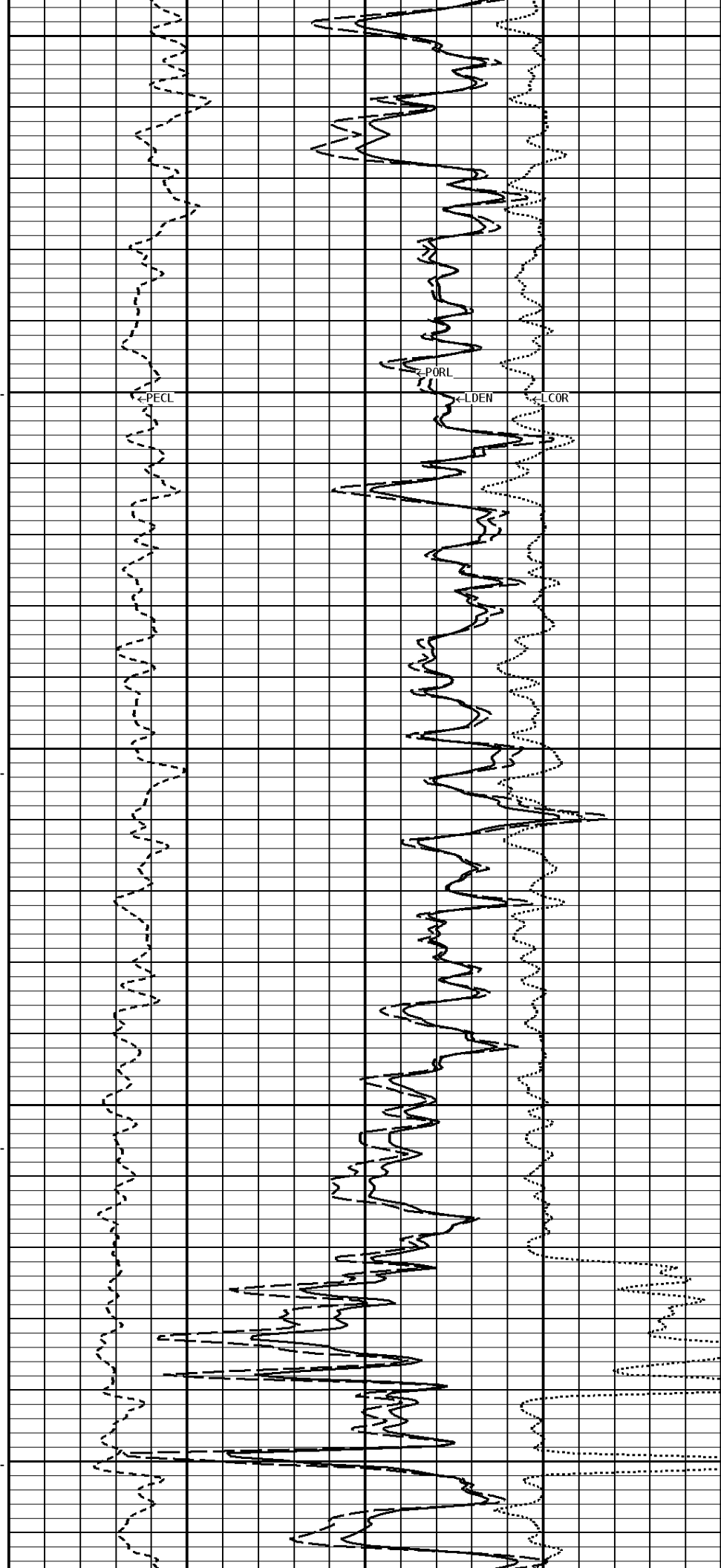
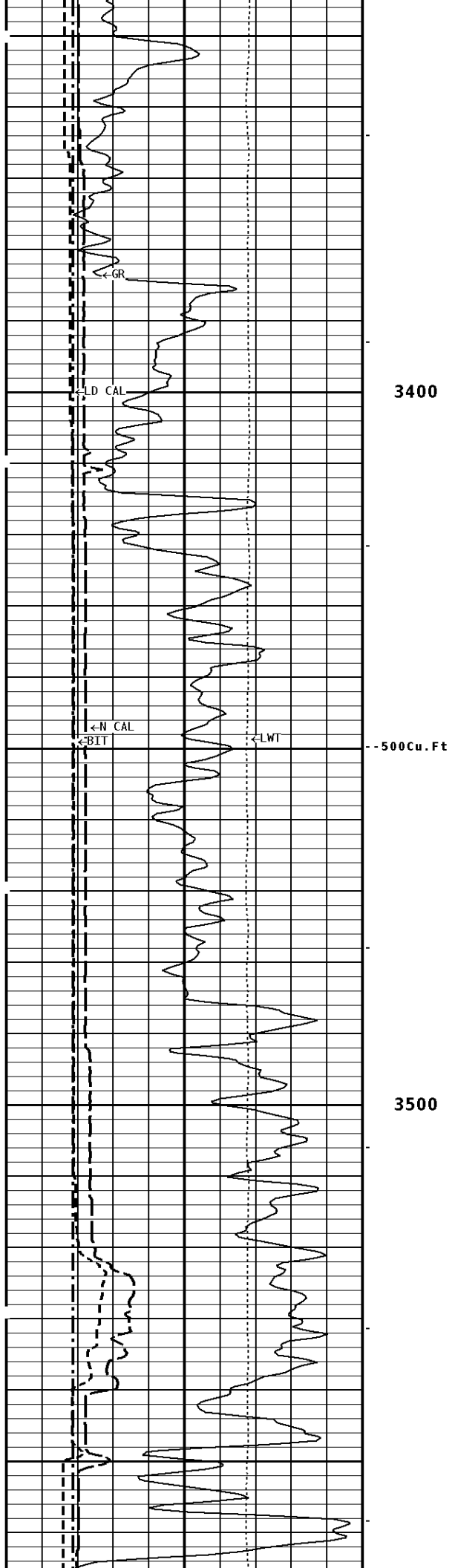


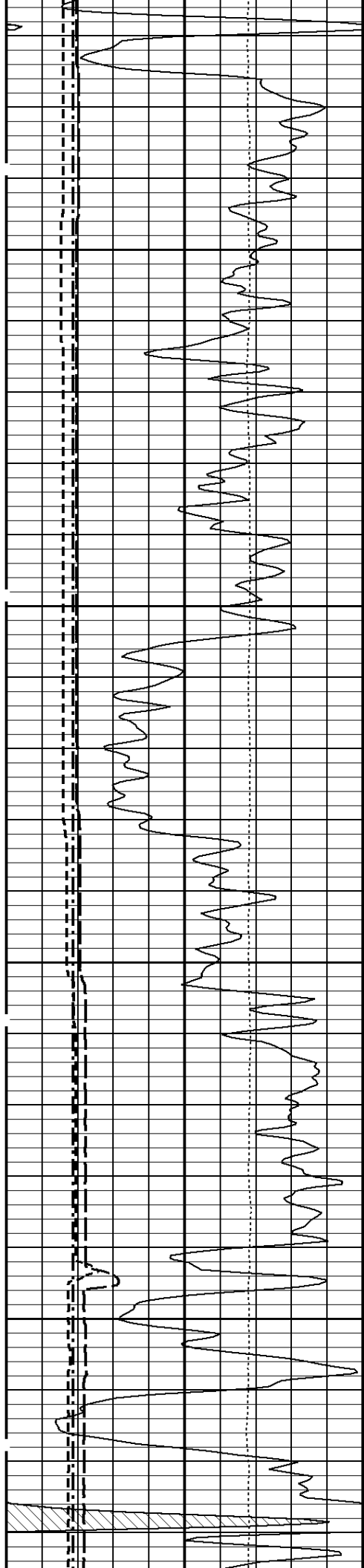
3000

3100







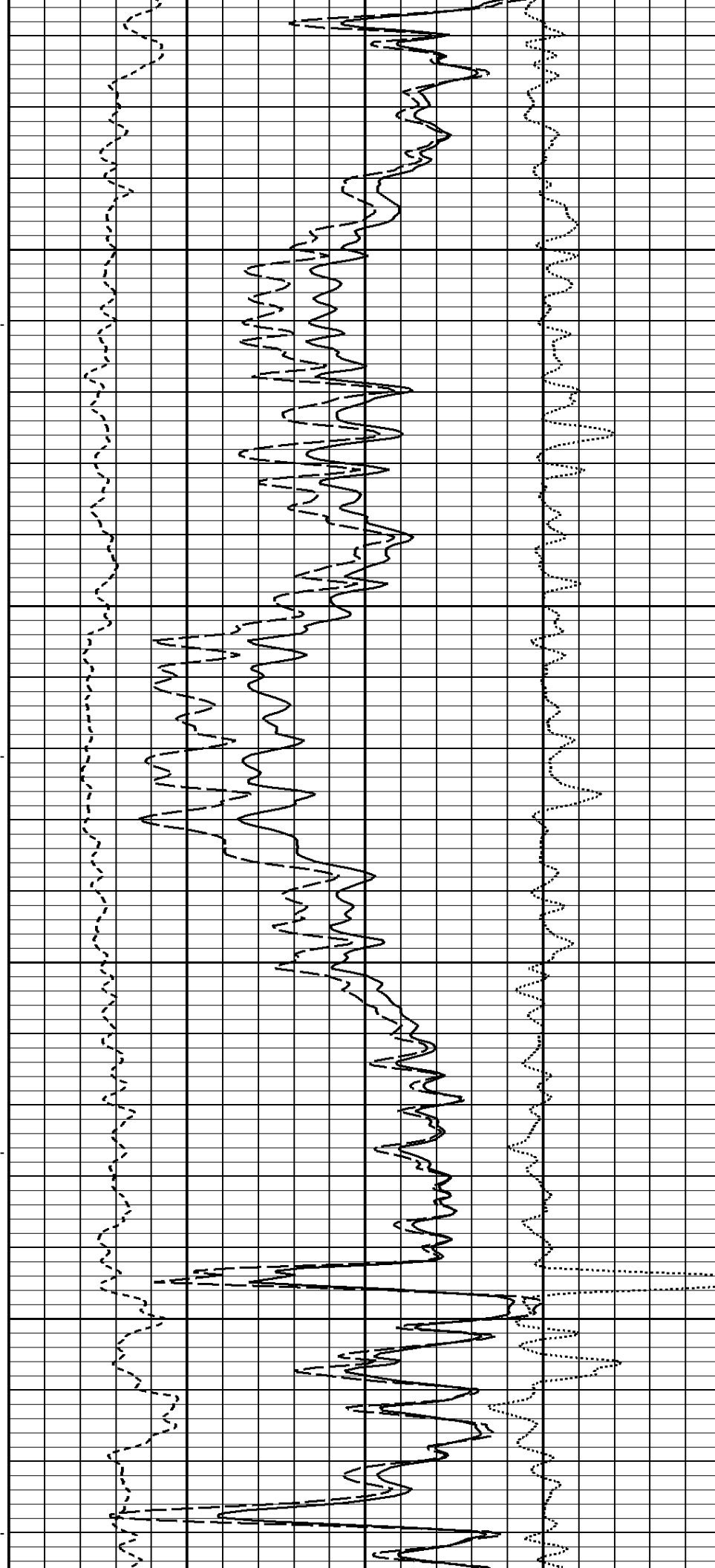


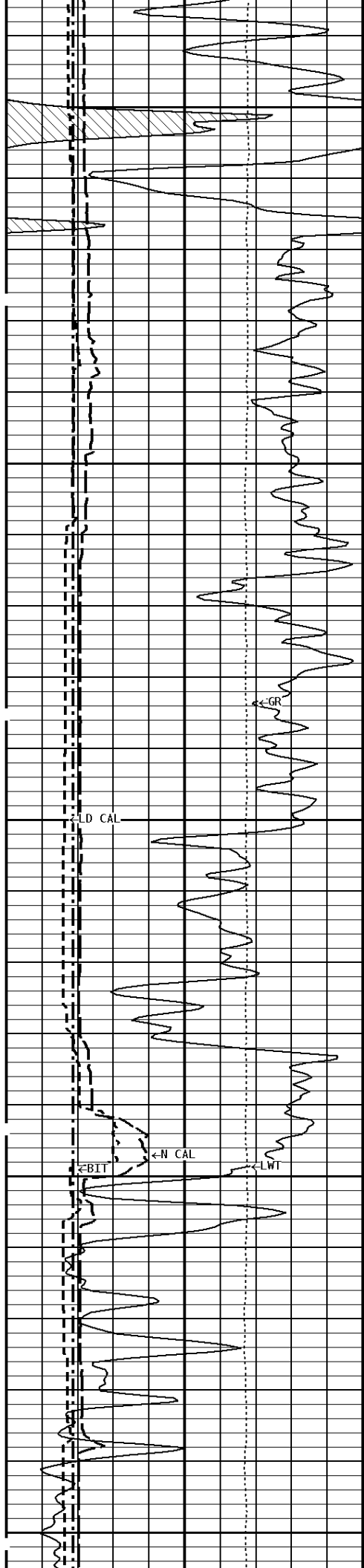
3600

3700

-- 400 Cu. Ft

200 Cu. Ft --

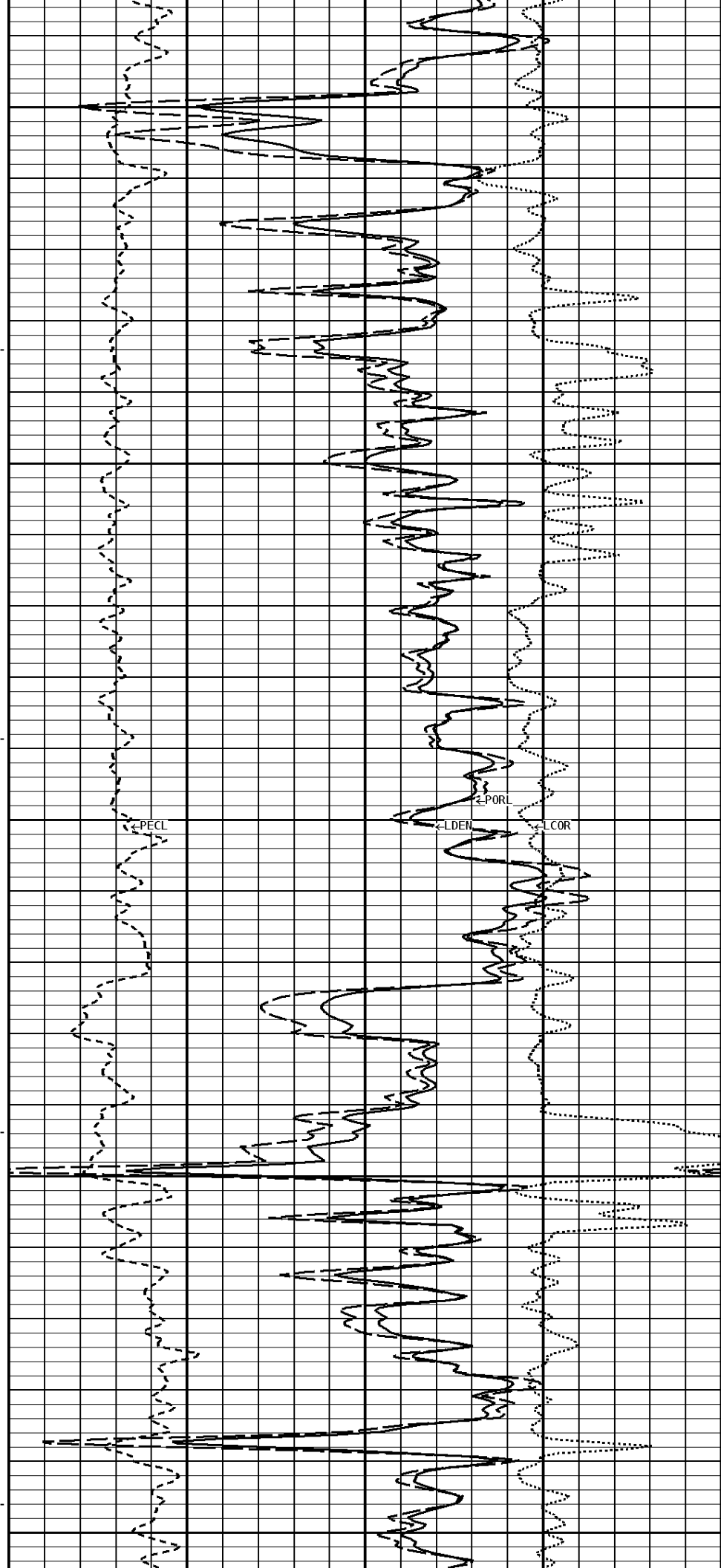


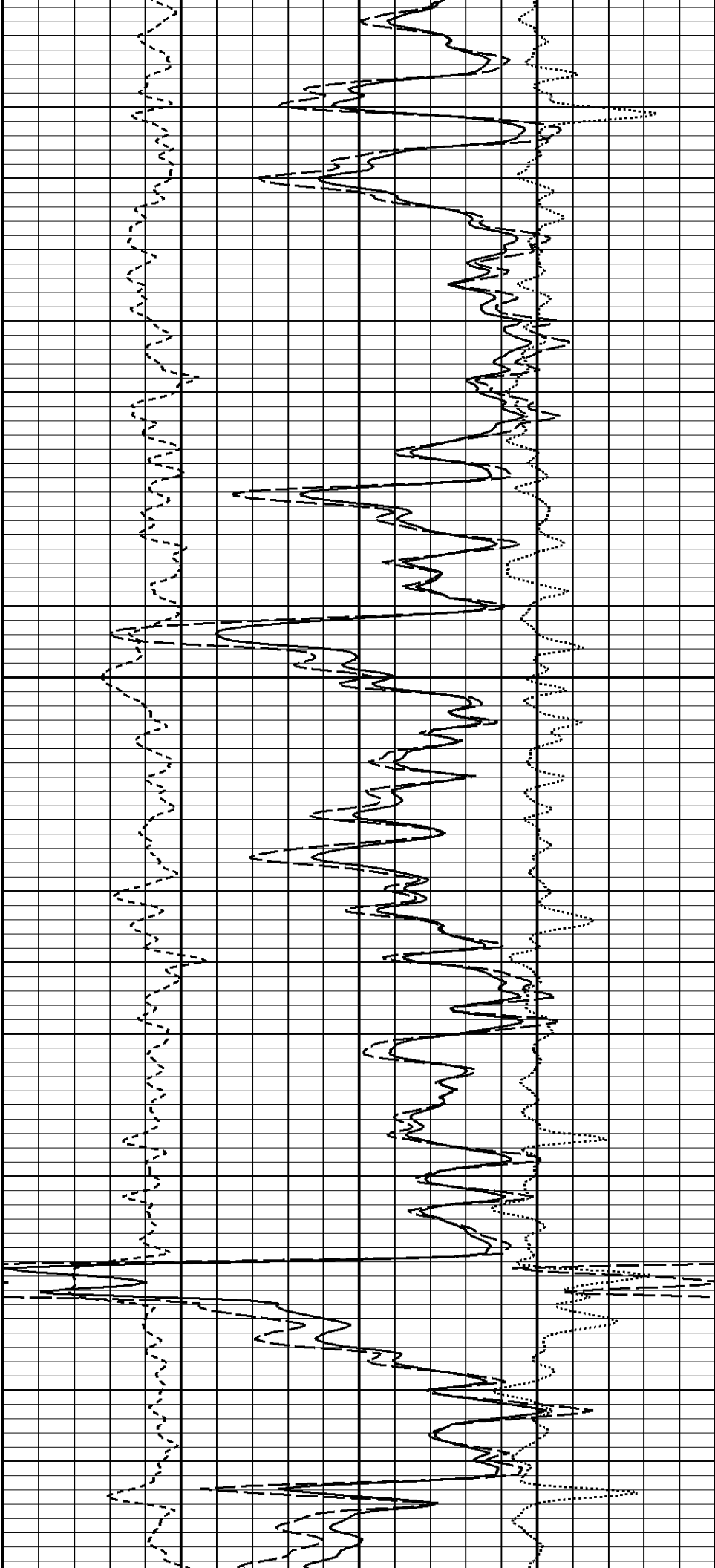
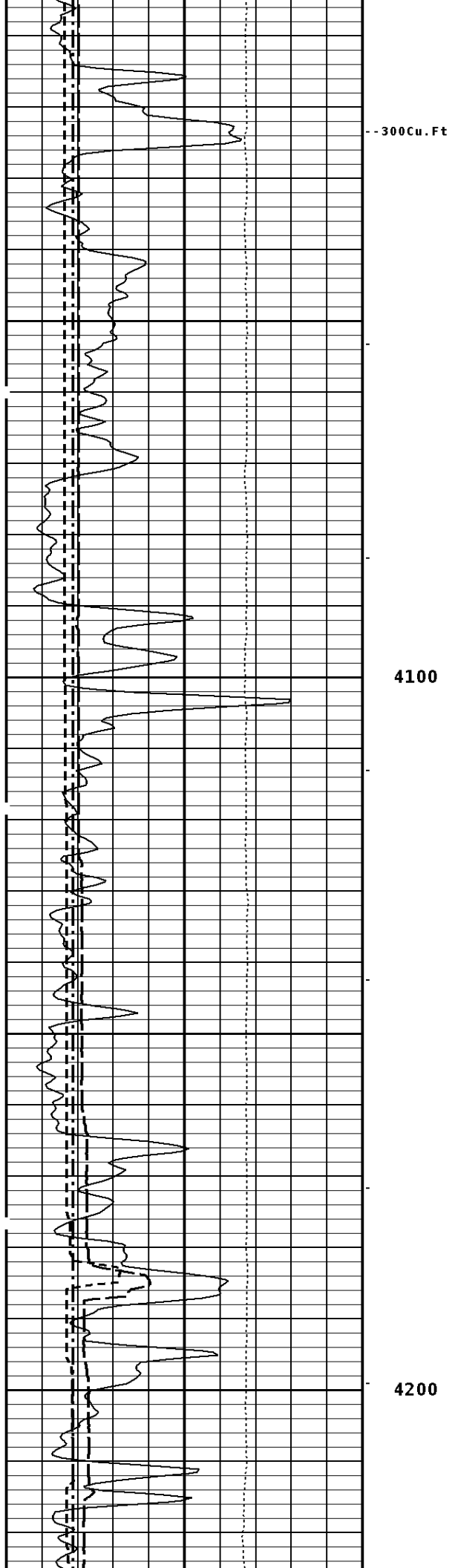


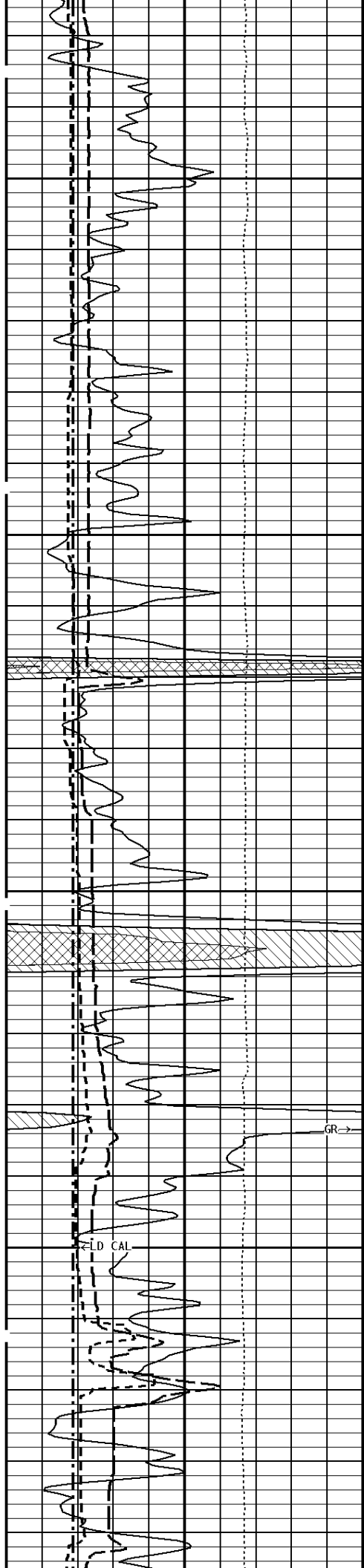
3800

3900

4000





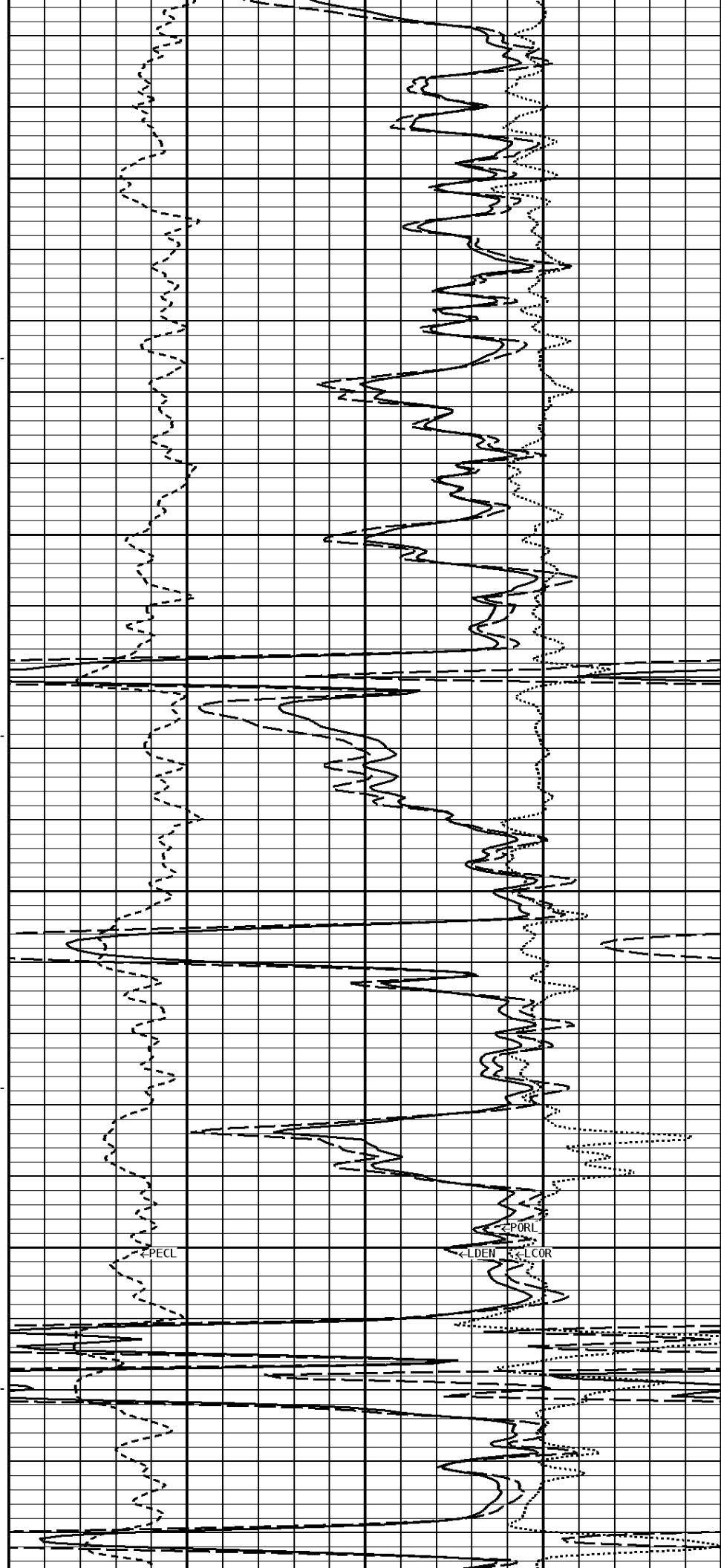


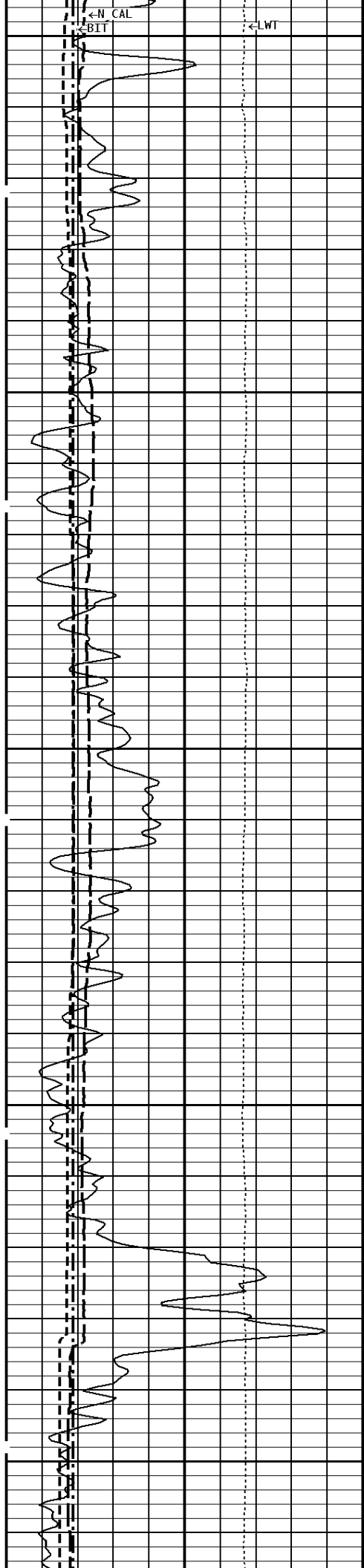
4300

--200Cu.Ft

100Cu.Ft--

4400

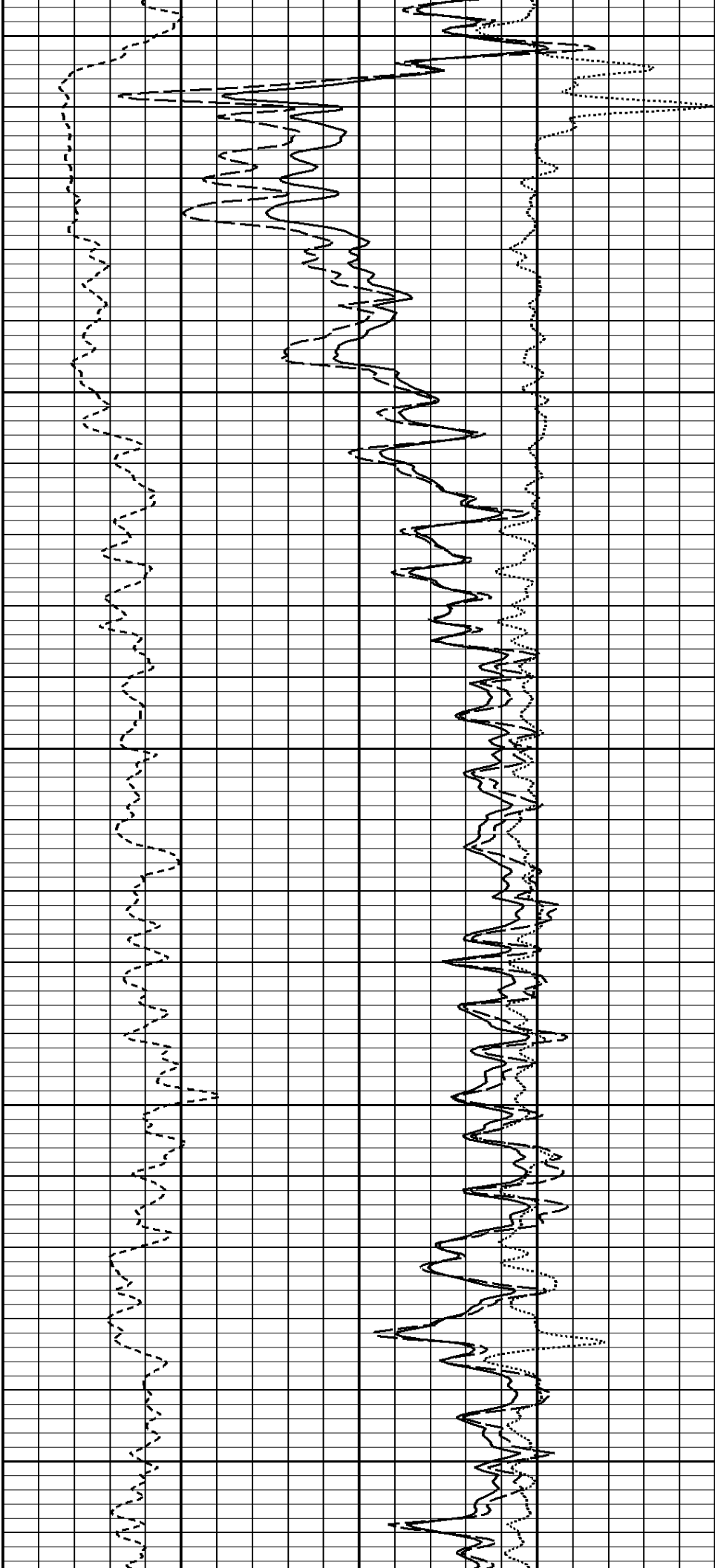


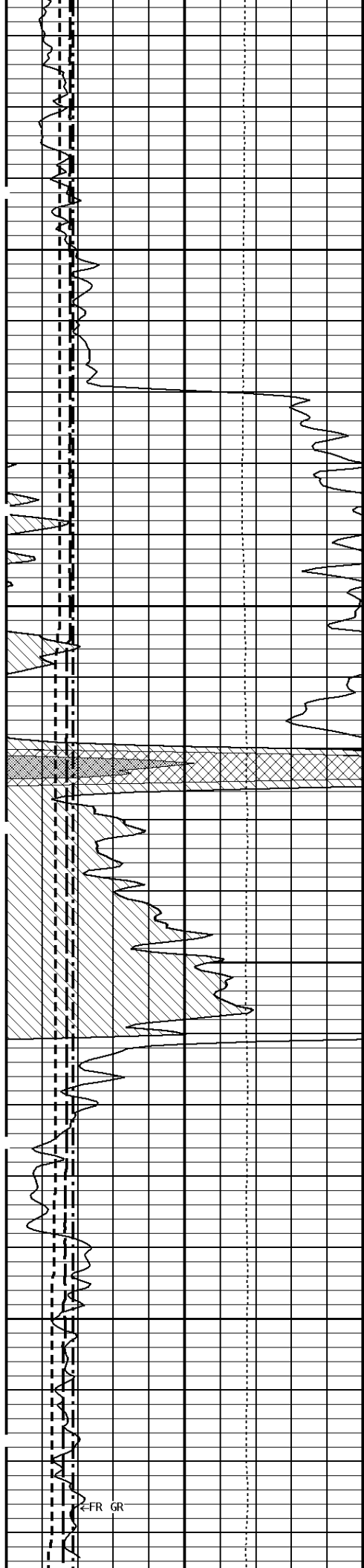


4500

--100Cu.Ft

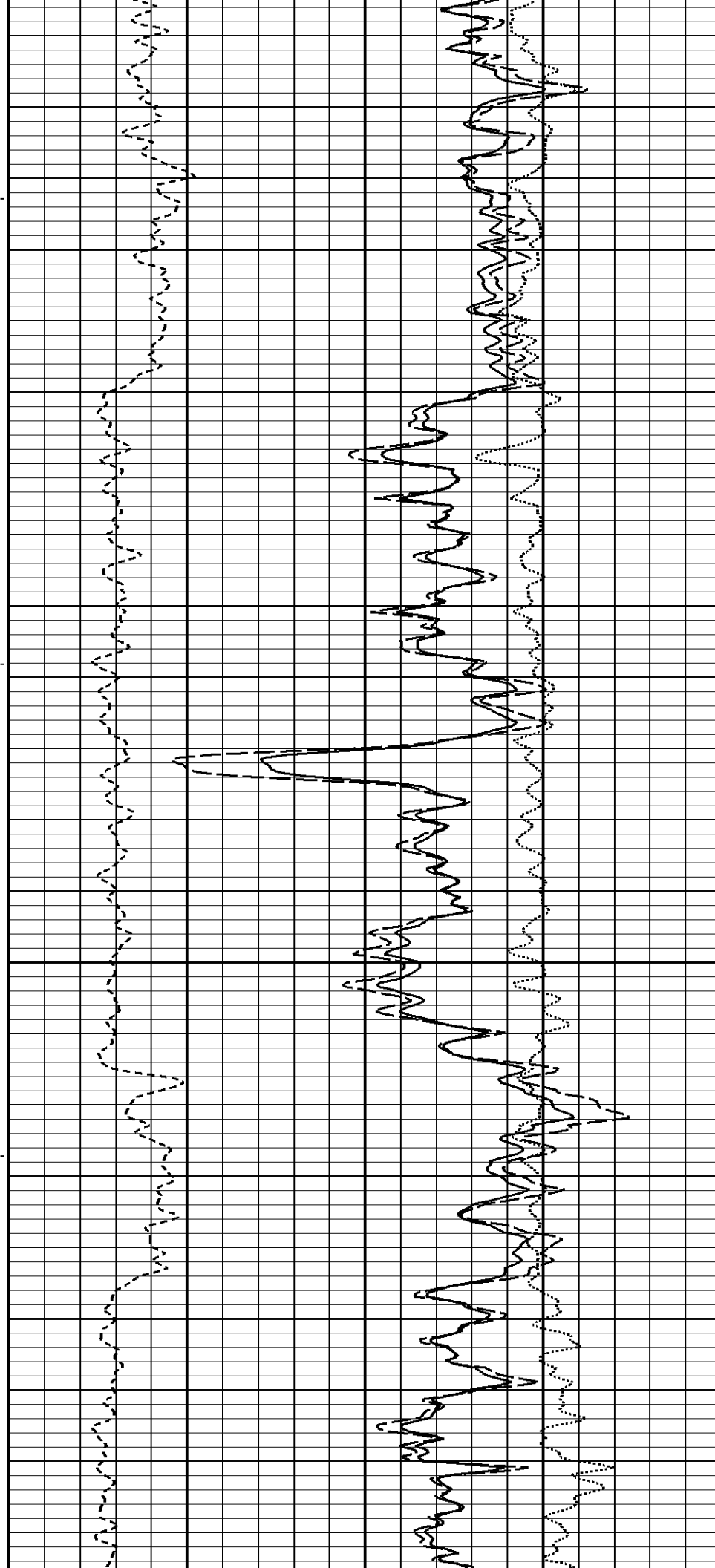
4600

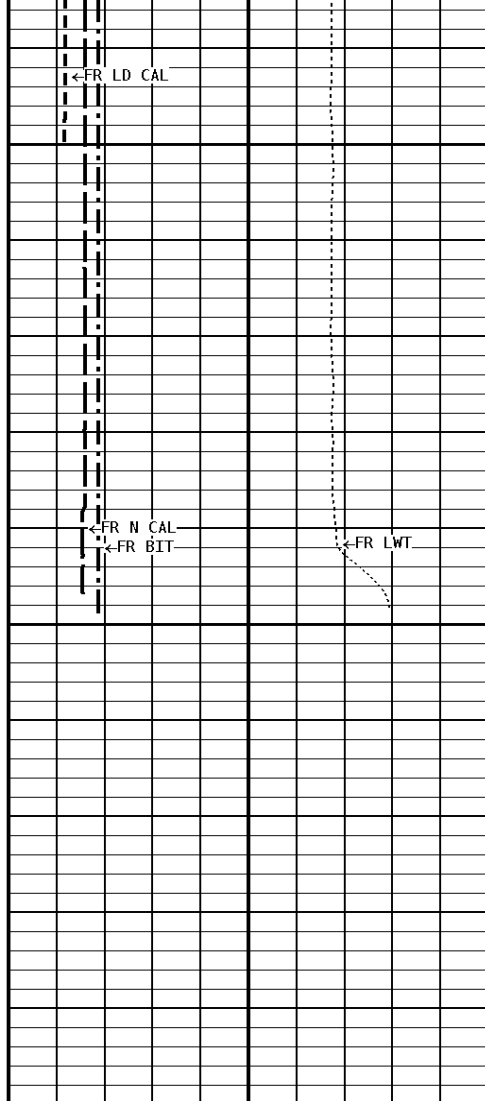




4700

4800

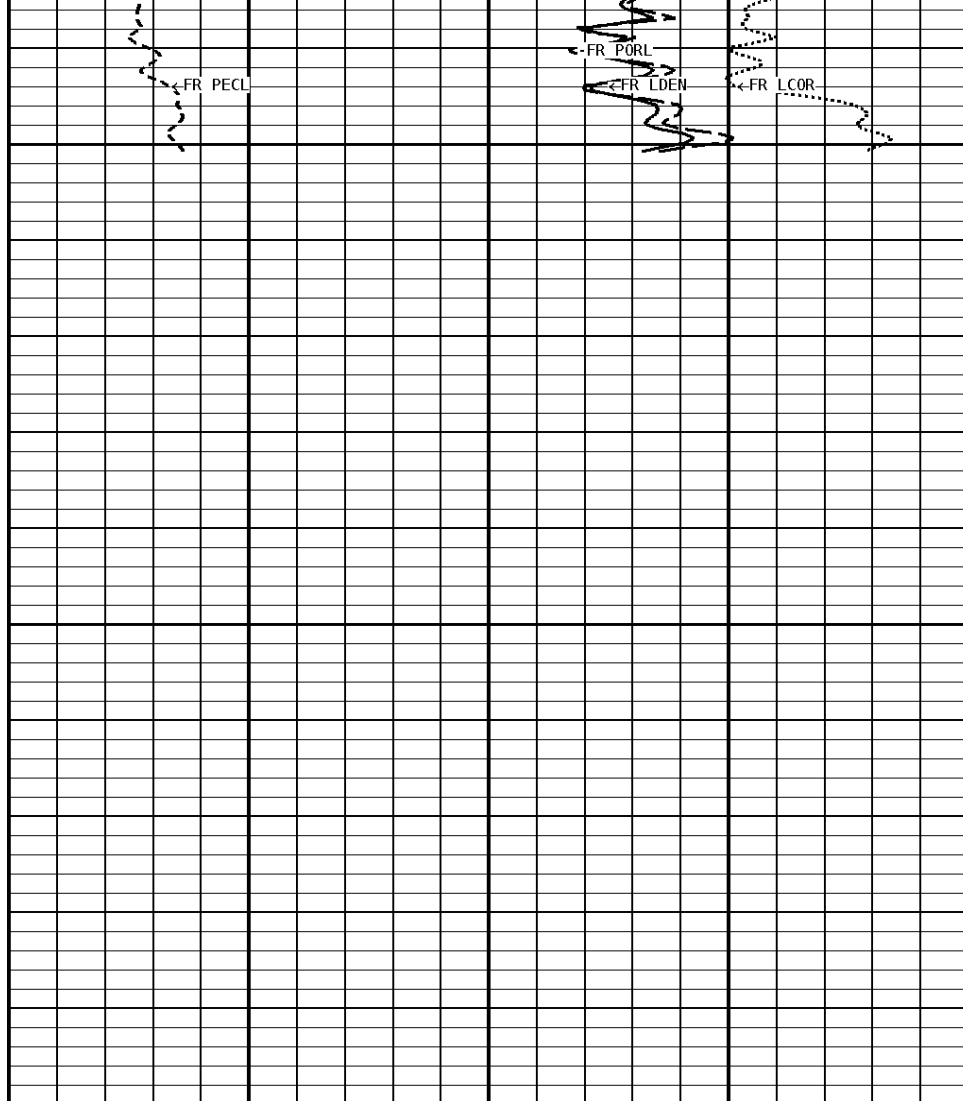




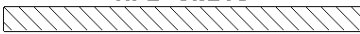
4900

4942

File #8.1.2



1:240 MAIN SECTION BULK DENSITY

GAMMA RAY API UNITS 150 0  300 150		COMPENSATED BULK DENSITY G/CC 3.0 4.0 2.0 3.0 1.0 2.0	
NEUTRON (Y) CALIPER INCHES (IN) 16 26 6 16		DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 30 -10 -10 -50	
DENSITY (X) CALIPER INCHES (IN) 16 26 6 16		PE CROSS-SECTION BARNs/ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
BIT SIZE INCHES (IN) 6 16			
TENSION LBS 10000 0			

Zone 1 99999.0 to 0.0 Feet

Matrix Density_____	2.71	g/cc
Fluid Density_____	1.00	g/cc
Formation Matrix_____	Limestone	
Drill Bit Size_____	7.875	in
Casing Diameter_____	5.500	in
Casing Correction (PHI N)_____	Disable	