

Tucker
WIRELINER SERVICES

COMPENSATED NEUTRON
PEL DENSITY MICRO LOG

Company RUNNING FOXES PETROLEUM Well SCHLICHTING 7-8-4 Field SAUZEK County SUMNER State KANSAS Country USA API No. 15-191-22597		File No : Company : RUNNING FOXES PETROLEUM INC Well : SCHLICHTING 7-8-4 Field : SAUZEK County : SUMNER State : KANSAS Country : USA API No : 15-191-22597	
Location : 2310 FNL & 1650 FEL SE SW NE		LSD : Sect : 8 Twp : 32S Rge : 1E	
Permanent Datum: Drilling Measured From: GL Log Measured From: KB Above Permanent Datum: 0.00 Ft		Elevations: KB 1268.00 Ft DF 1267.00 Ft GL 1257.00 Ft	
Services: GRT CNT LDT MLT CST PIT			
Date 2011-05-15			
Run Number 1			
Depth--Driller 4175.0 Ft			
Depth--Logger 4170.0 Ft			
First Reading 4148.0 Ft			
Last Reading 2200.0 Ft			
Casing--Driller 259.0 Ft			
Casing--Logger 254.0 Ft			
Bit Size 7.875 In			
Casing Size 8.625 In			
Hole Fluid Type CHEM			
Density 9.3 LBS/GAL			
Fluid Loss 8.8 CC			
PH/Viscosity 10.0 42.0 SEC			
Sample Source			
RMF@Measured Temp. 2.000 @ 53 F			
RMF@Measured Temp 1.700 @ 53 F			
RMF@Measured Temp. 2.300 @ 53 F			
Source RMF/RMC			
RM@BHT 0.000 @ 121 F			
Time Circulation Stopped			
Max Recorded Temp. 121 F			
Equipment/Base TRK 127 TULSA			
Recorded By T. MONTGOMERY			
Witnessed By C. COUNTS / J. ABBOTT			

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	4175.00	8.625	32.00	259.00

Run Number	1	
Date	2011-05-15	
Date/Time On Bottom		
Depth to Fluid	0.0 Ft	
Salinity	0.000 PPM	
RMF@BHT	0.000 @ 121 F	
RMC@BHT	0.000 @ 121 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.

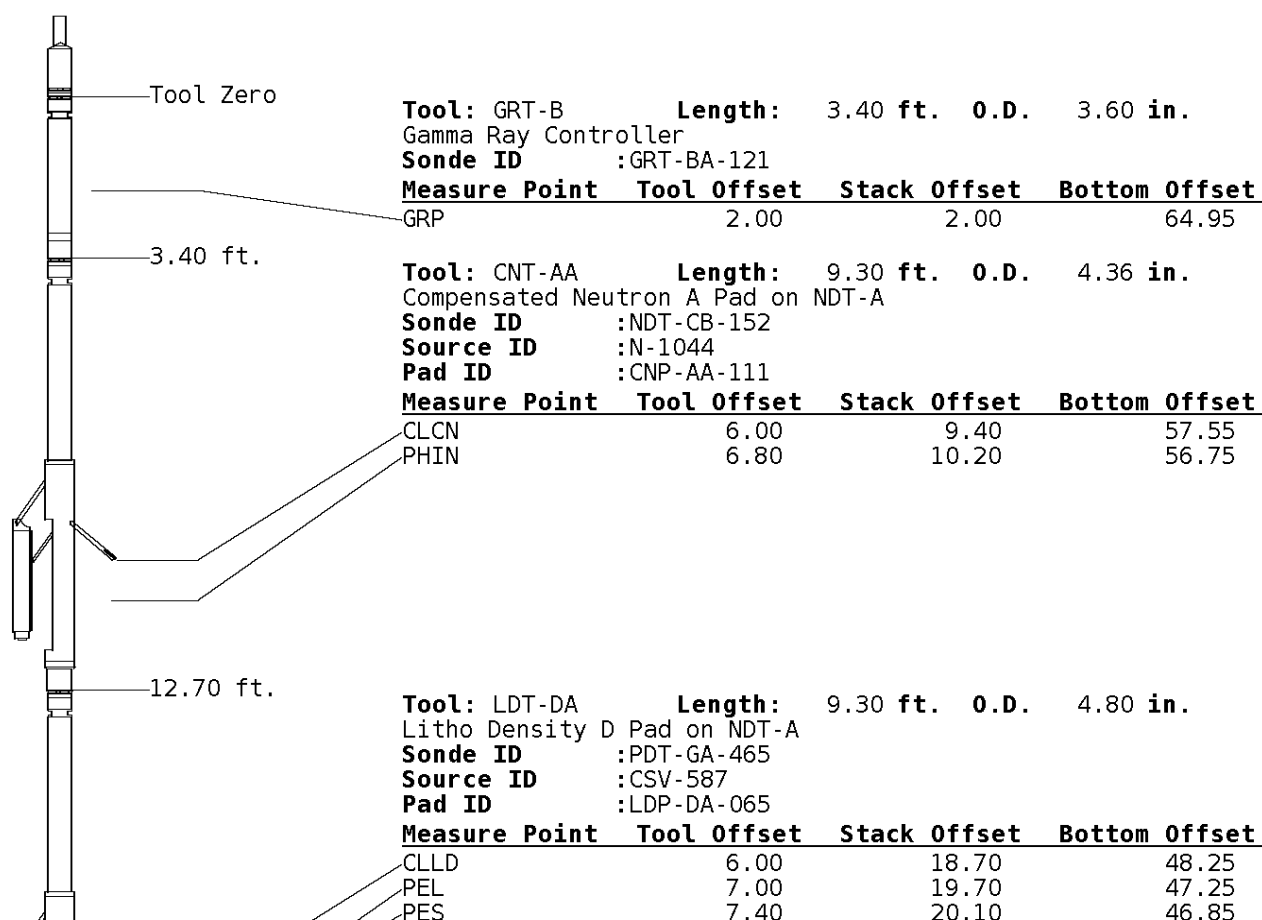
GRT: GRP.
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 MLT: NOR_R, INV_R, MSCLPIN.
 CST: PORS, DDCDTE, TT1PF, TT3PF, ITT.
 PIT: ILD, ILM, SPU, SFLAEC

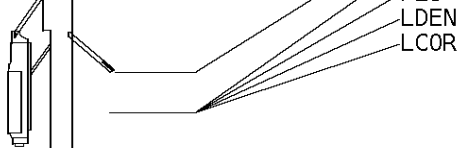
OPERATORS:

J.THOMAS

Tool String Schematic

Total Tool Length - 66.95 ft.
Maximum Outside diameter - 6.00 in.
Net Weight in Air - 1171.00 lbs.



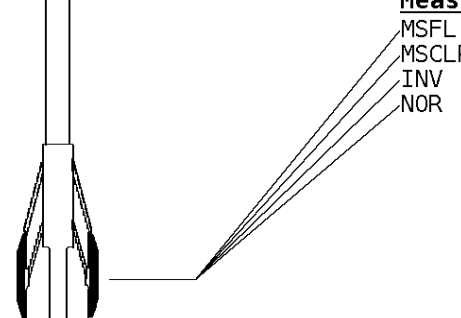


7.20 19.90 47.05
7.20 19.90 47.05

22.00 ft.

Tool: MST-DA **Length:** 9.66 ft. **O.D.** 6.00 in.
Micro Spherically Focused (IC)
Sonde ID :MST-NG-26

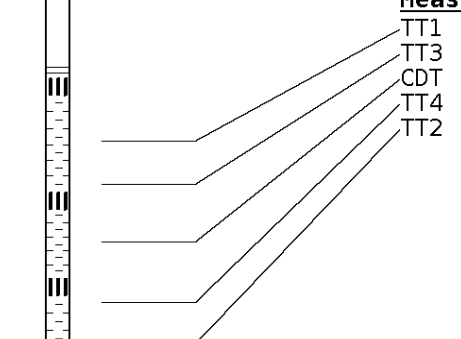
Measure Point	Tool Offset	Stack Offset	Bottom Offset
MSFL	7.60	29.60	37.35
MSCLP	7.60	29.60	37.35
INV	7.60	29.60	37.35
NOR	7.60	29.60	37.35



31.66 ft.

Tool: CST-AD **Length:** 13.80 ft. **O.D.** 3.60 in.
Open Hole Sonic
Sonde ID :CST-AD-38

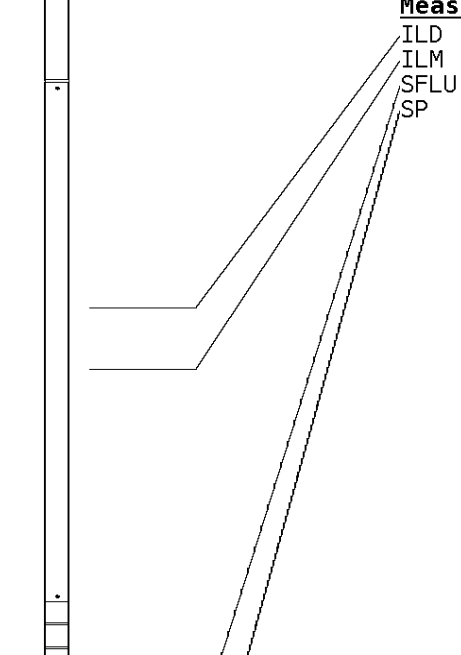
Measure Point	Tool Offset	Stack Offset	Bottom Offset
TT1	4.80	36.46	30.49
TT3	5.80	37.46	29.49
CDT	7.30	38.96	27.99
TT4	8.80	40.46	26.49
TT2	9.80	41.46	25.49



45.46 ft.

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
Phased Dual Induction w/ RM & D
Sonde ID :PIT-CA-074

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	54.38	12.56
ILM	10.10	55.56	11.39
SFLU	17.49	62.95	4.00
SP	20.60	66.06	0.88



LWT 66.95 ft.

Well File: running foxes pet schlichting 7-8-4

Scale: 1:240

Segment: V1.D1.S6 Reprocess of segment_004

Acquired: 2011-05/15 06:59 3.2.0-9901

Reference: 0

Processed: 2011-05/15 08:27 3.2.0-9901

CALIPER MICRO
INCHES (IN)

16 26
6 16

TENSION
LBS

10000 0

BIT SIZE
INCHES (IN)

6 16

Volume
Dolo/Shale



MICRO-INVERSE
OHMM

0 40

MICRO-NORMAL
OHMM

0 40

DENSITY (X) CALIPER
INCHES (IN)

16 26
6 16

Volume
Quartz



PE CROSS-SECTION
BARNES/ELECTRON

0 10 -0.25 0.25

DENSITY CORRECTION
G/CC

NEUTRON (Y) CALIPER
INCHES (IN)

16 26
6 16

Volume
Calcite



NEUTRON POROSITY
PERCENT (LIMESTONE MATRIX)

30 -10

GAMMA RAY
API UNITS

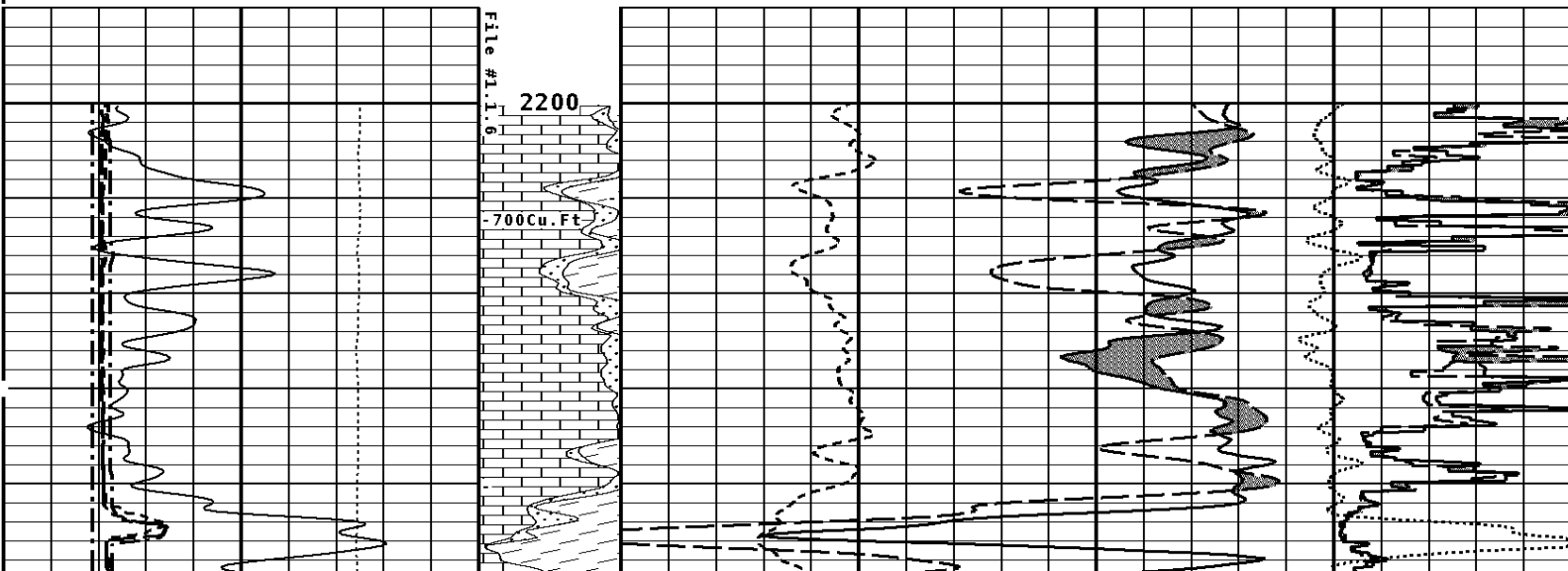
150 300
0 150

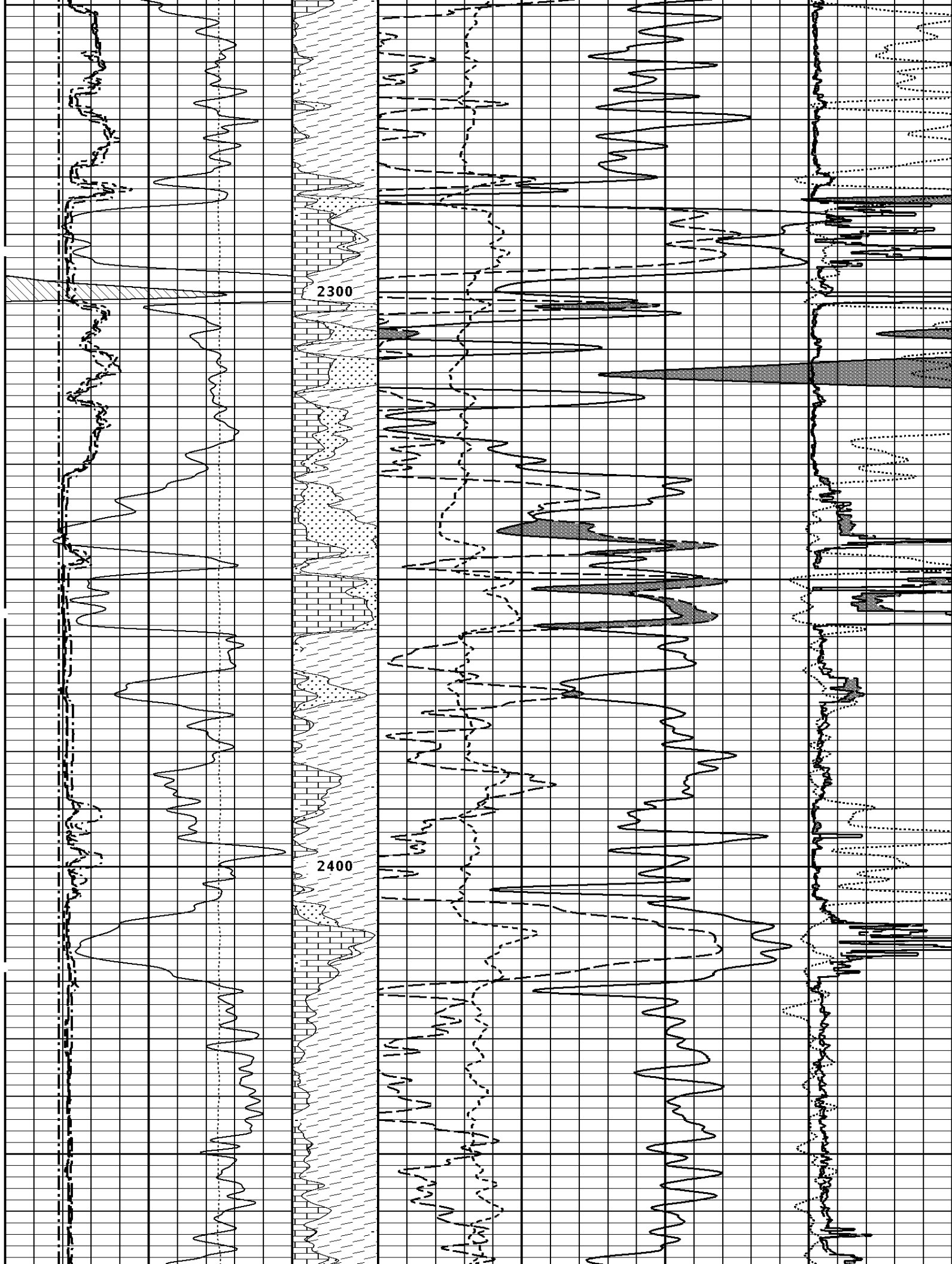
-BHV AHV-
CU.FT

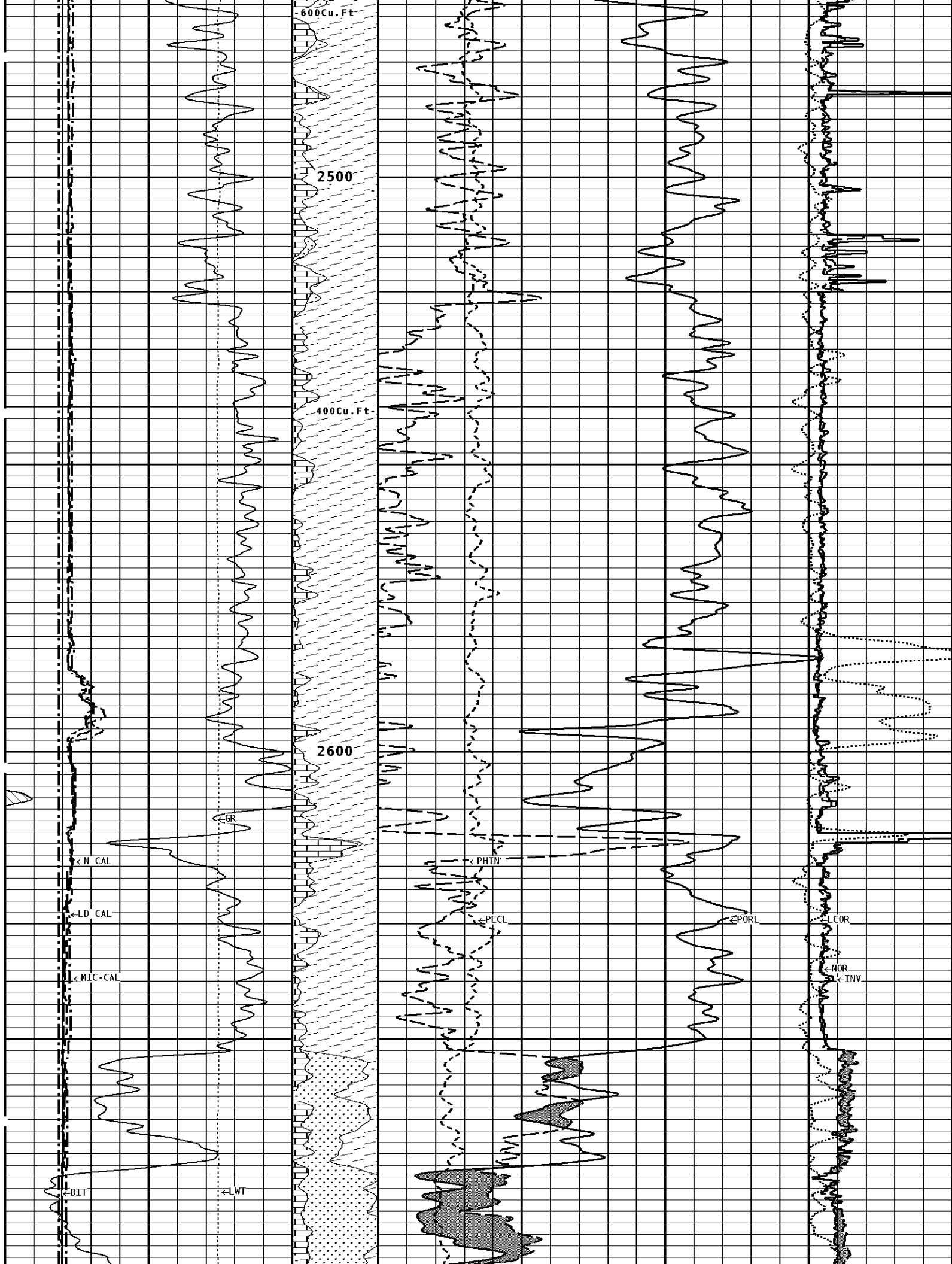
DENSITY POROSITY
PERCENT (2.71 g/cc)

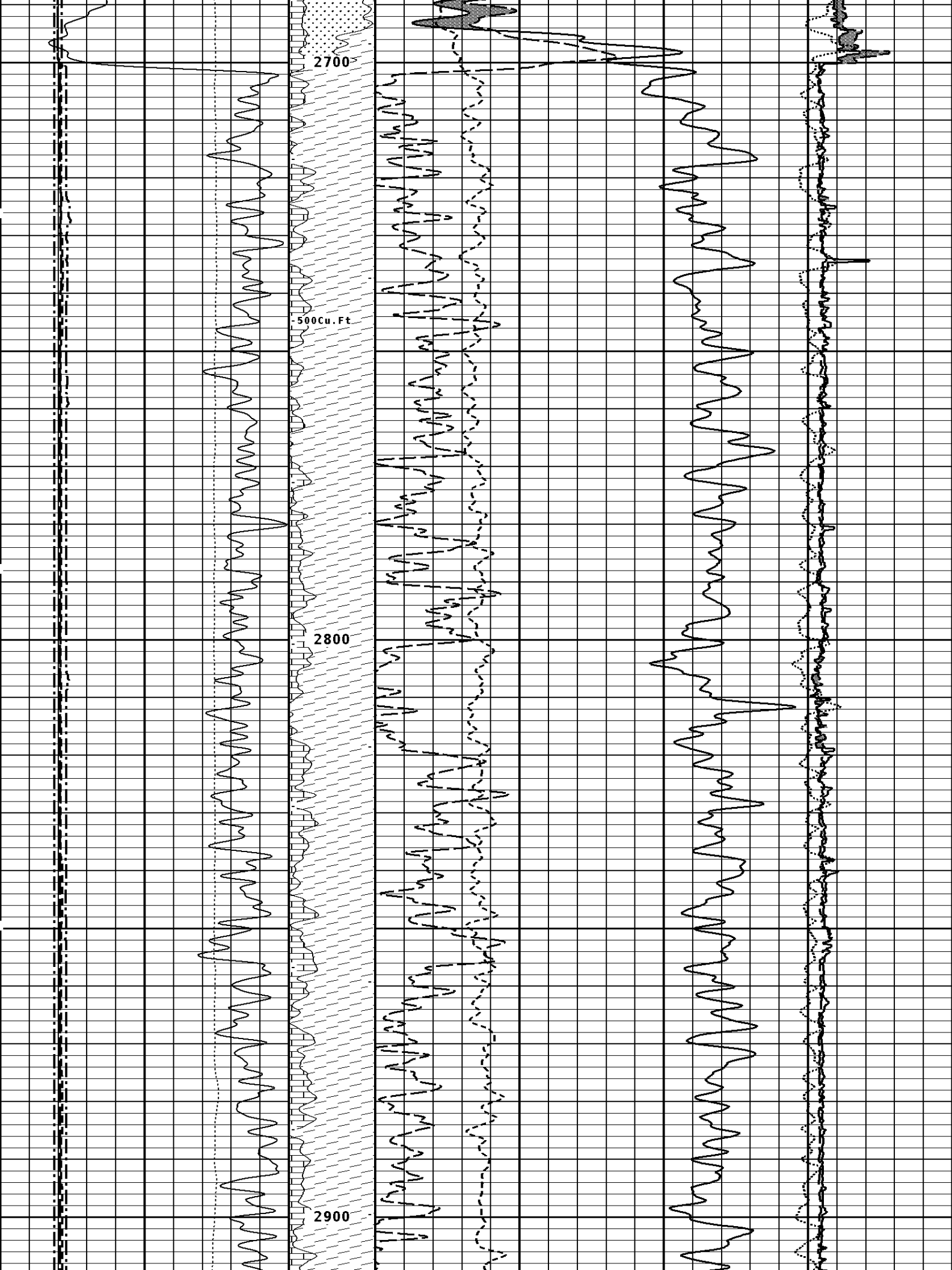
70 30
30 -10
-10 -50

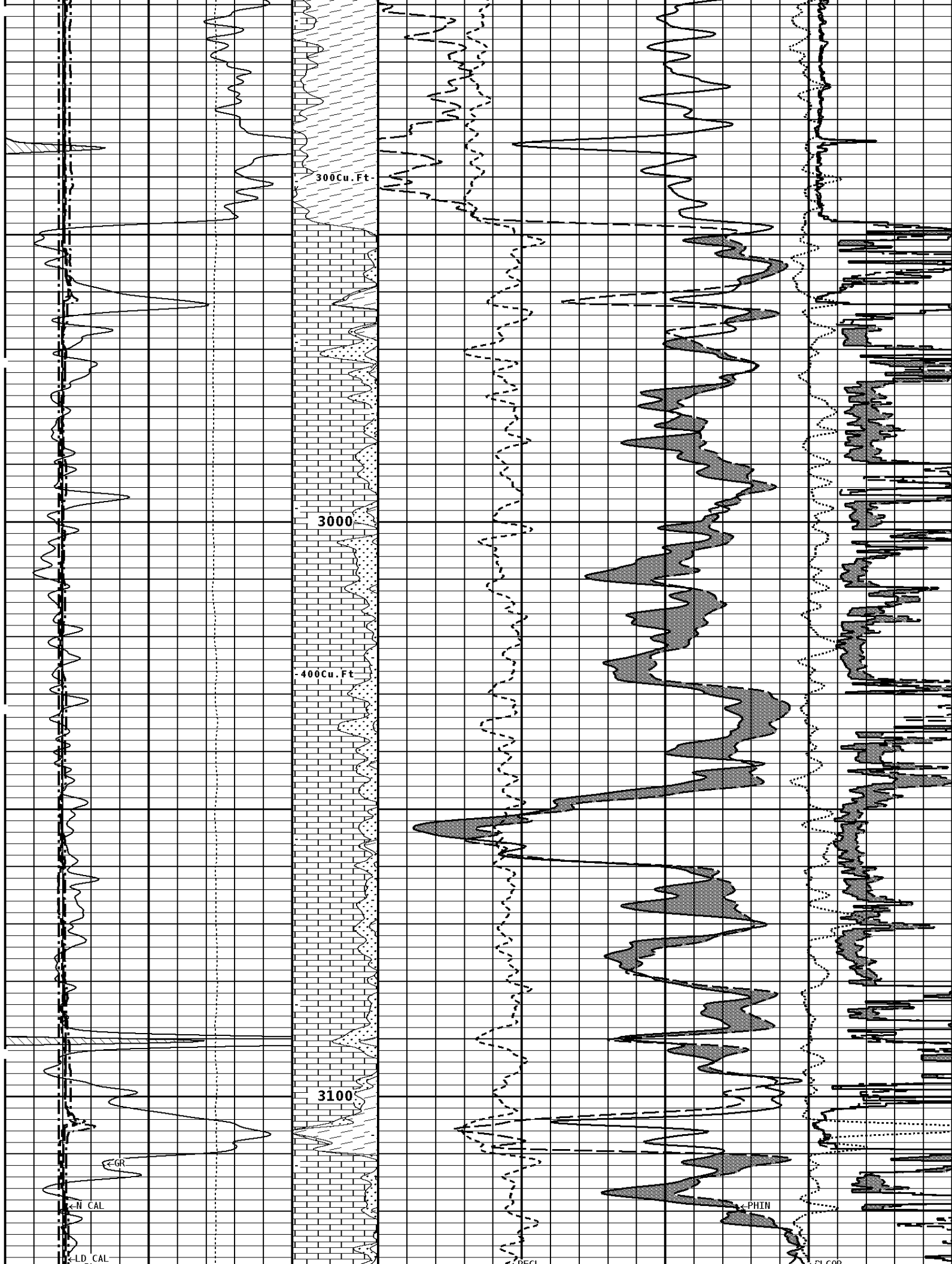
1:240 MAIN SECTION

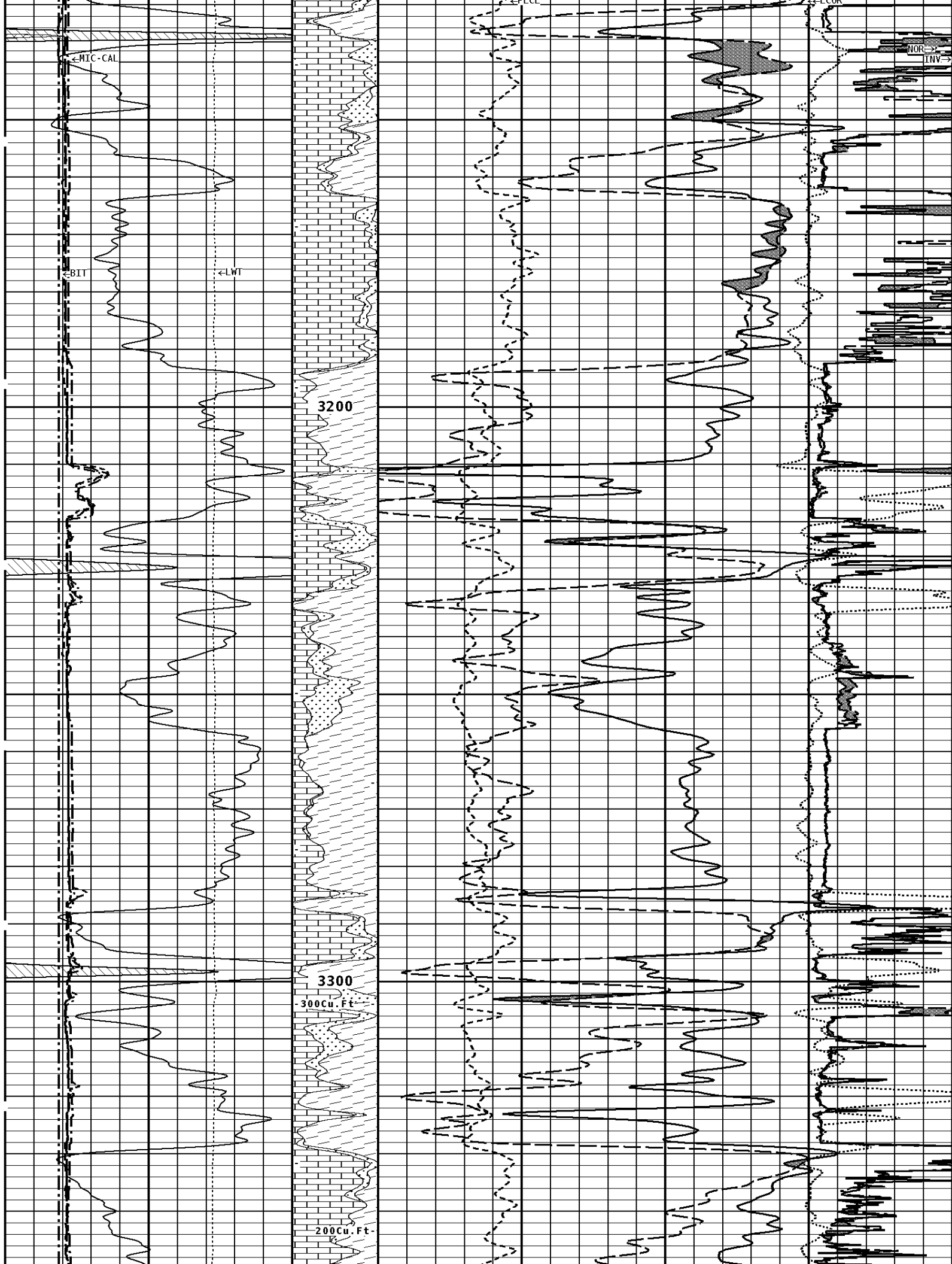


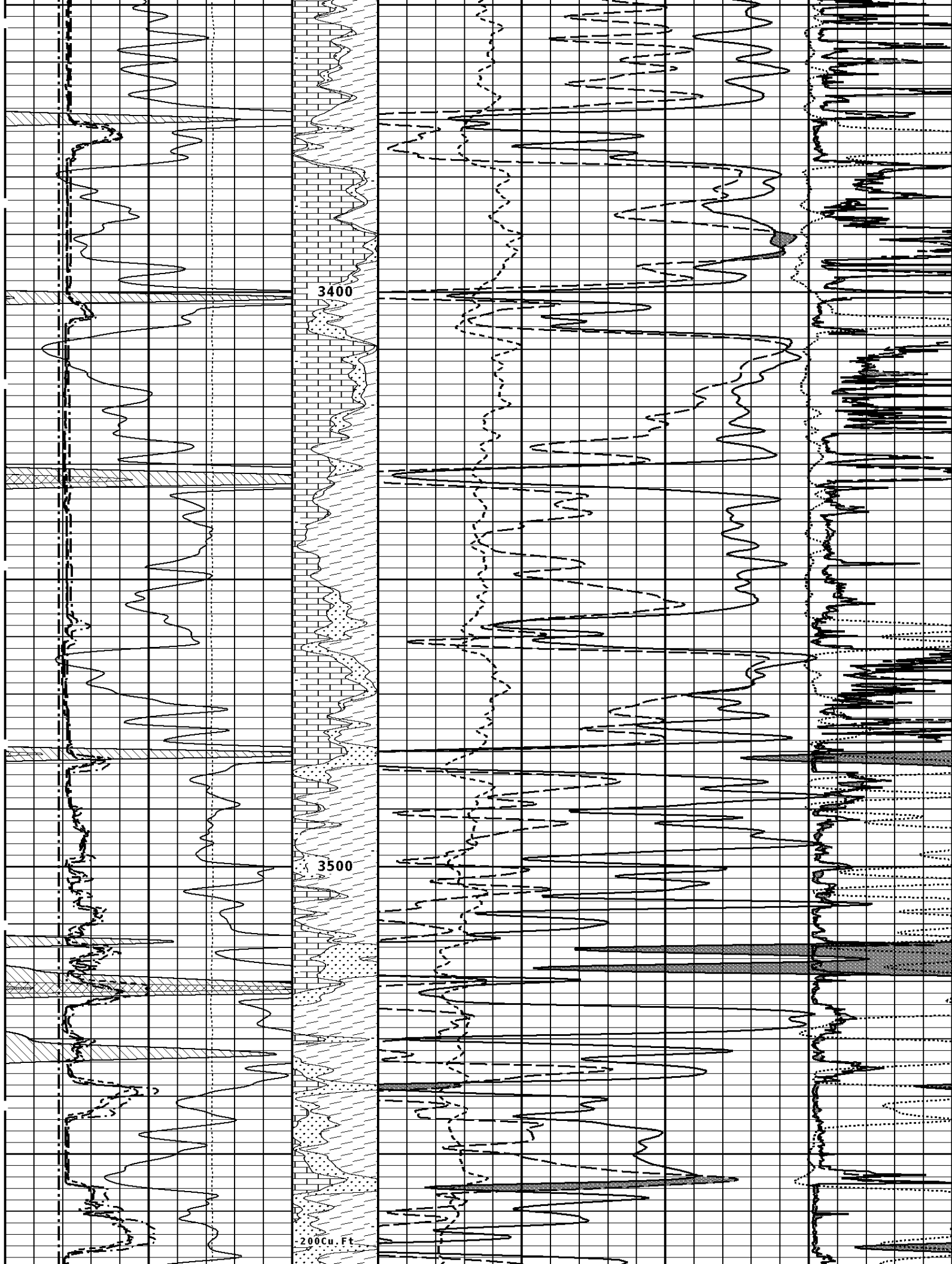


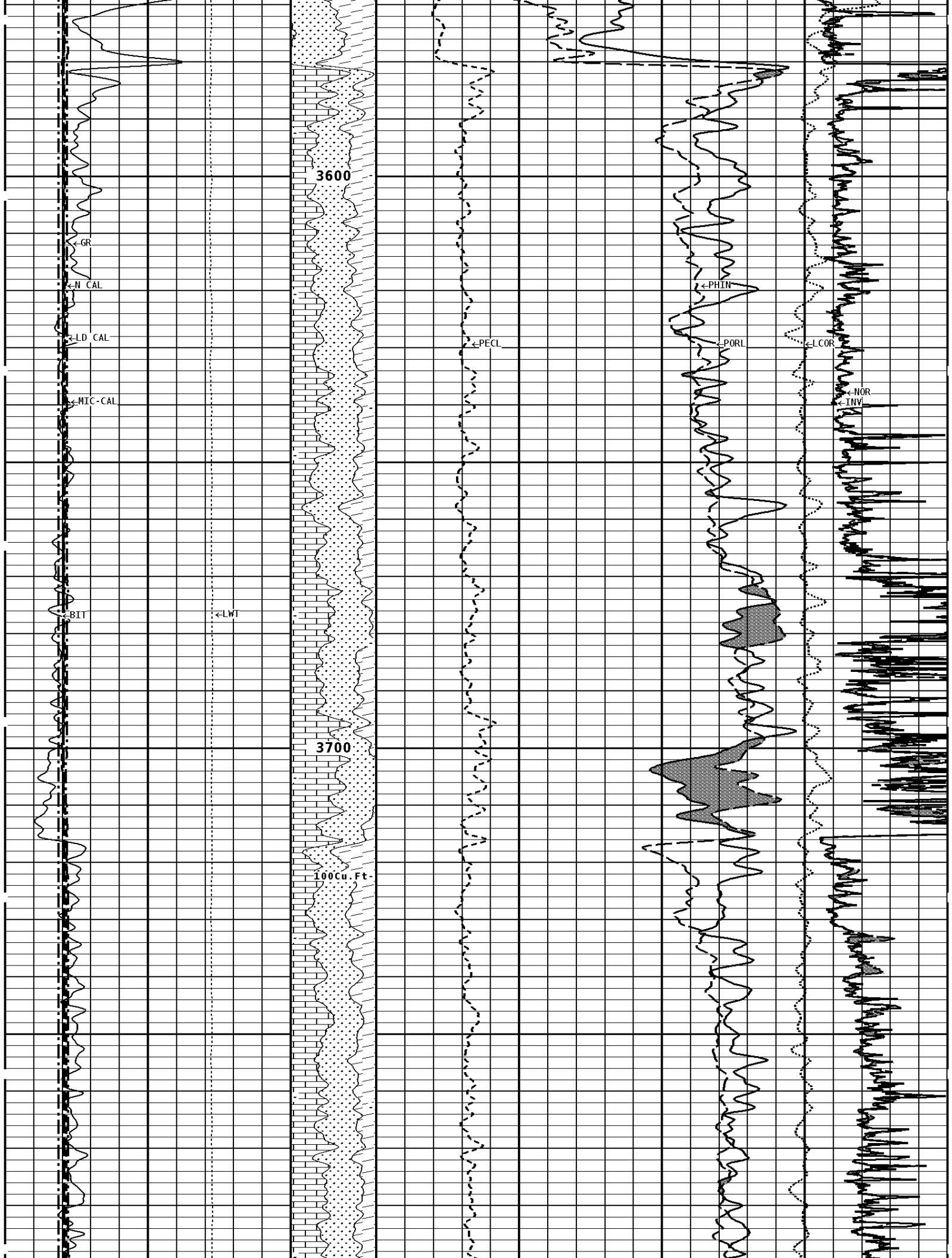


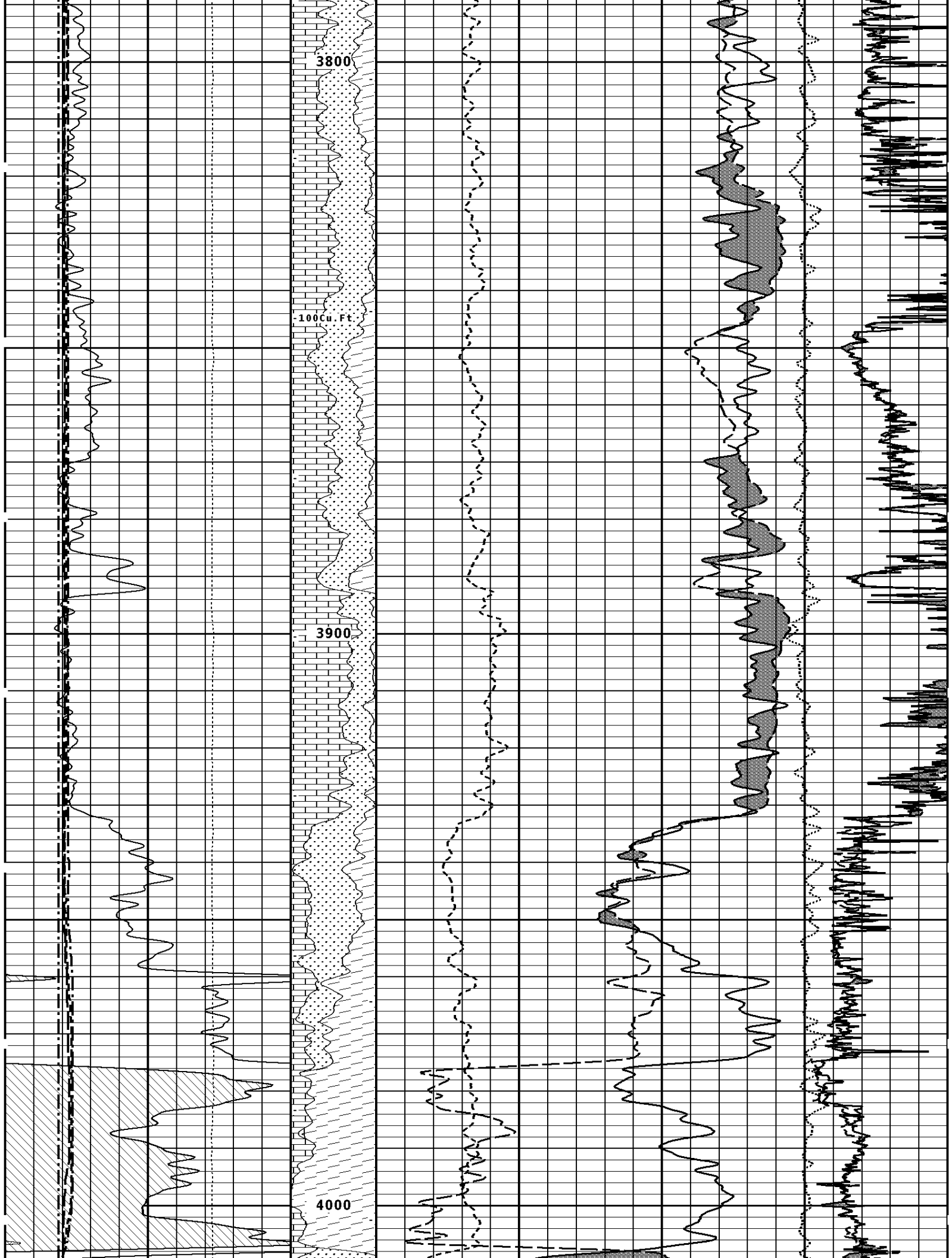


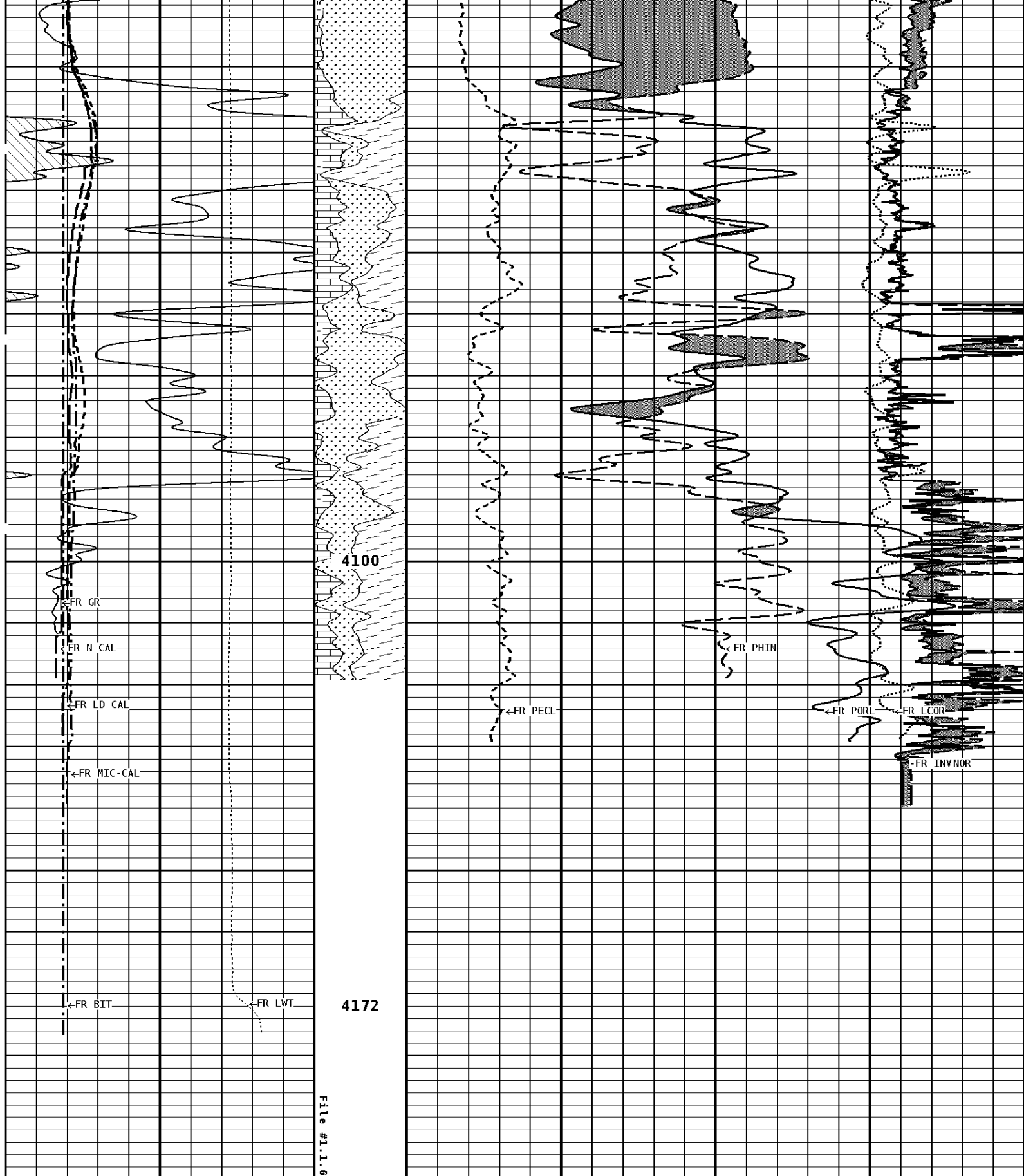










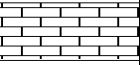
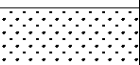


1:240 MAIN SECTION

GAMMA RAY
API UNITS

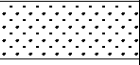
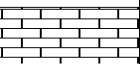
- BHV AHV -
CU. FT

DENSITY POROSITY
PERCENT (2.71 g/cc)

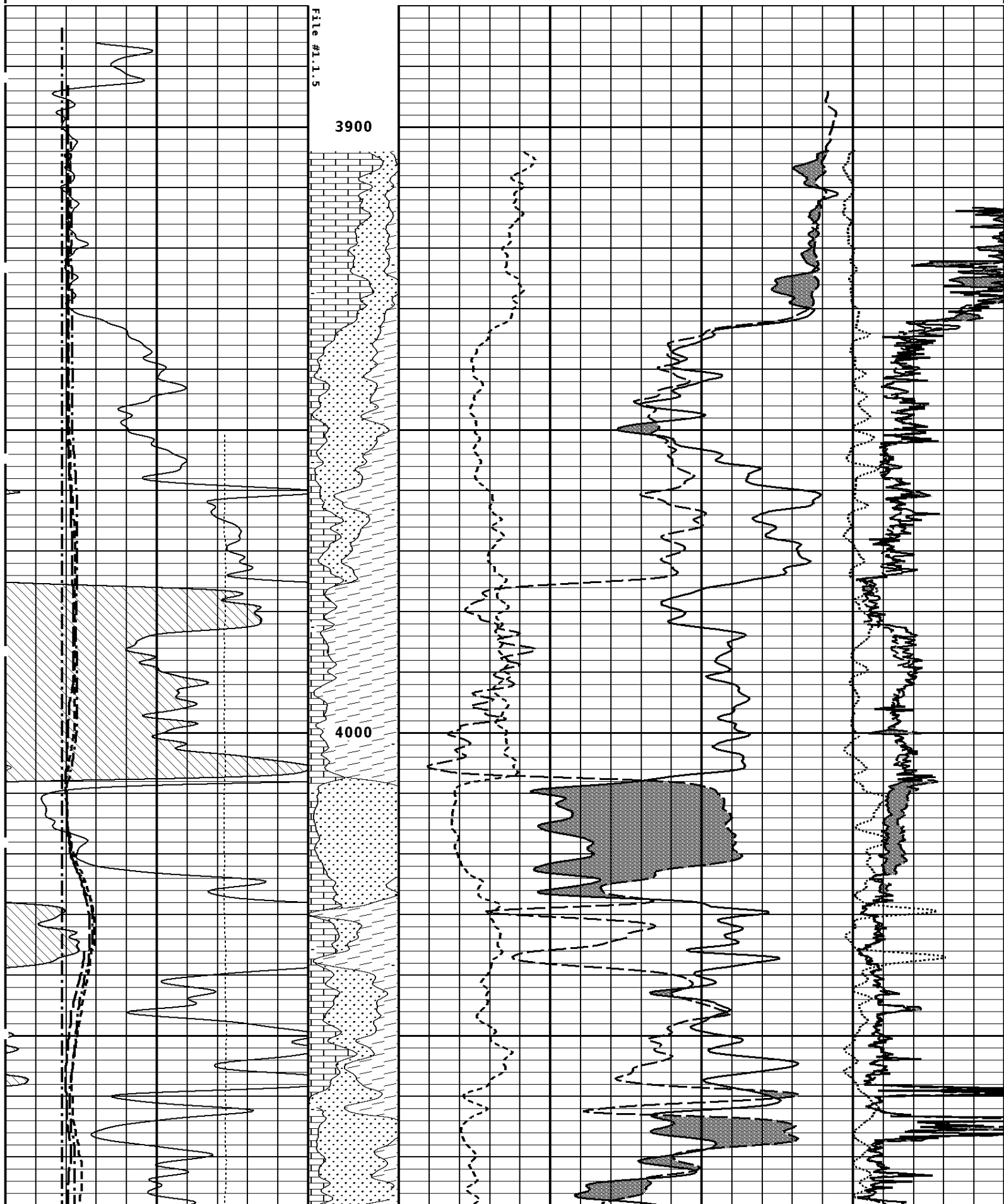
150 0		300 150		70 30		30 -10
				-10		-50
NEUTRON (Y) CALIPER INCHES (IN)			Volume Calcite	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)		
16 6		26 16		30		-10
DENSITY (X) CALIPER INCHES (IN)			Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON	DENSITY CORRECTION G/CC	
16 6		26 16		0	10	-0.25 0.25
BIT SIZE INCHES (IN)			Volume Dolo/Shale			
6		16				
TENSION LBS						MICRO-NORMAL OHMM
10000		0				0 40
CALIPER MICRO INCHES (IN)						MICRO-INVERSE OHMM
16 6		26 16				0 40

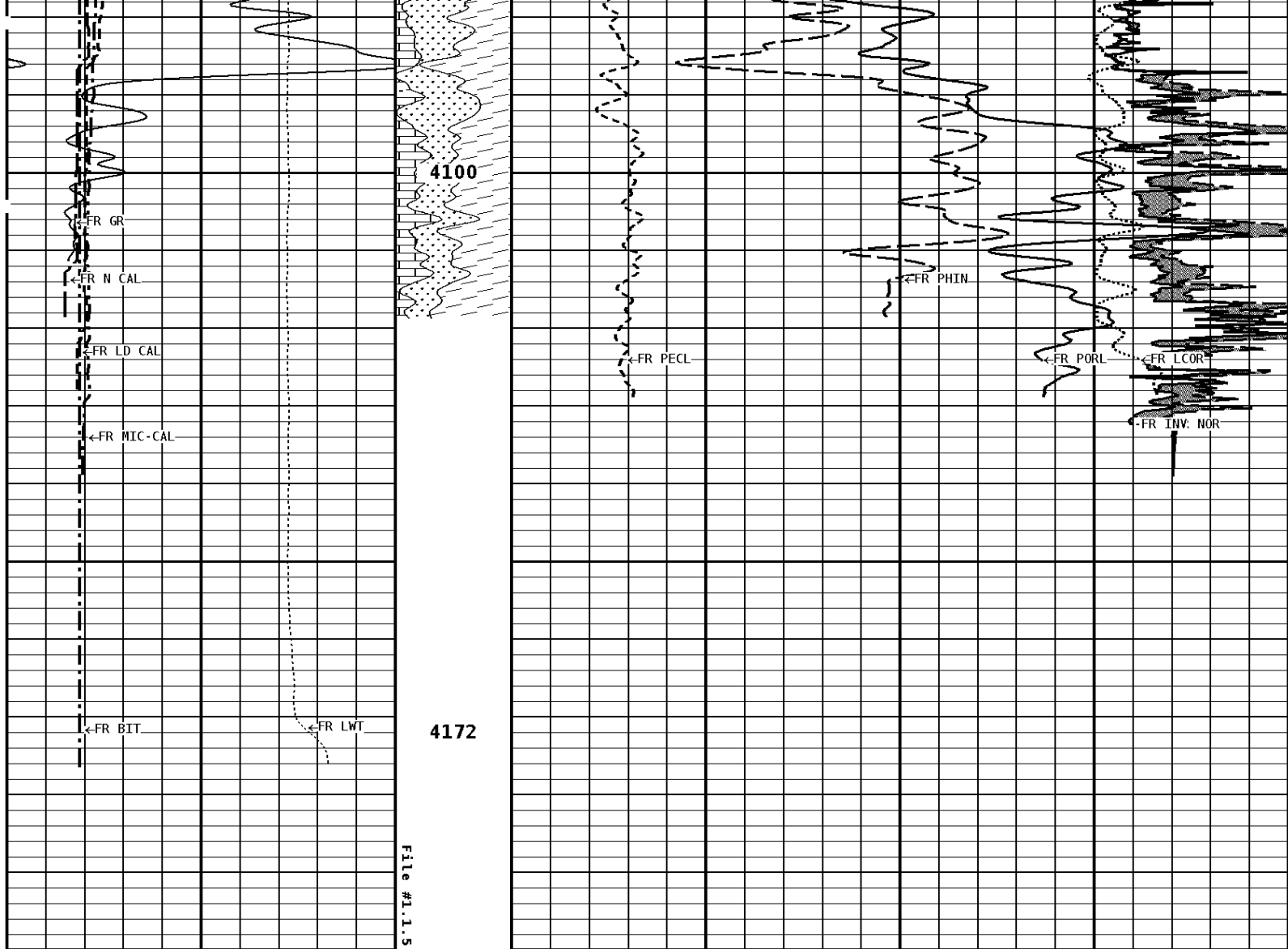
*** Borehole Zone Factors ***

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		4.500	in
Casing Correction (PHI N)		Disable	

Well File: running foxes pet schlichting 7-8-4				Scale: 1:240		
Segment: V1.D1.S5 RPT_REPRO				Acquired: 2011-05/15 06:45 3.2.0-9901		
Reference: 0				Processed: 2011-05/15 08:26 3.2.0-9901		
CALIPER MICRO INCHES (IN)						
16 6		26 16				
TENSION LBS						
10000		0				
BIT SIZE INCHES (IN)			Volume Dolo/Shale			
6		16				
DENSITY (X) CALIPER INCHES (IN)			Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON	DENSITY CORRECTION G/CC	
16 6		26 16		0	10	-0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN)			Volume Calcite	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)		
16 6		26 16		30		-10
GAMMA RAY API UNITS			- BHV AHV - CU.FT	DENSITY POROSITY PERCENT (2.71 g/cc)		
150 0		300 150		70 30		30 -10
				-10		-50

1-240 REPEAT SECTION





1:240 REPEAT 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	-0.25
6	16		10	0.25
BIT SIZE INCHES (IN)		Volume Dolo/Shale	MICRO-NORMAL OHMM	
6	16		0	40
TENSION LBS			MICRO-INVERSE OHMM	
10000	0		0	40

**CALIPER MICRO
INCHES (IN)**

16 26
6 16

*** Borehole Zone Factors ***

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 _____ 4.500 in
Casing Correction (PHI N) _____ Disable

Well File: running foxes pet schlichting 7-8-4

Scale: 1:240

Segment: V1.D1.S6 Reprocess of segment_004

Acquired: 2011-05/15 06:59 3.2.0-9901

Reference: 0

Processed: 2011-05/15 08:27 3.2.0-9901

**TENSION
LBS**

10000 0

**BIT SIZE
INCHES (IN)**

6 16

**DENSITY (X) CALIPER
INCHES (IN)**

16 26
6 16

**NEUTRON (Y) CALIPER
INCHES (IN)**

16 26
6 16

**GAMMA RAY
API UNITS**

150 300
0 150

- BHV AHV -
CU. FT

**PE CROSS-SECTION
BARN/ ELECTRON**

0 10 -0.25 0.25

**DENSITY CORRECTION
G/CC**

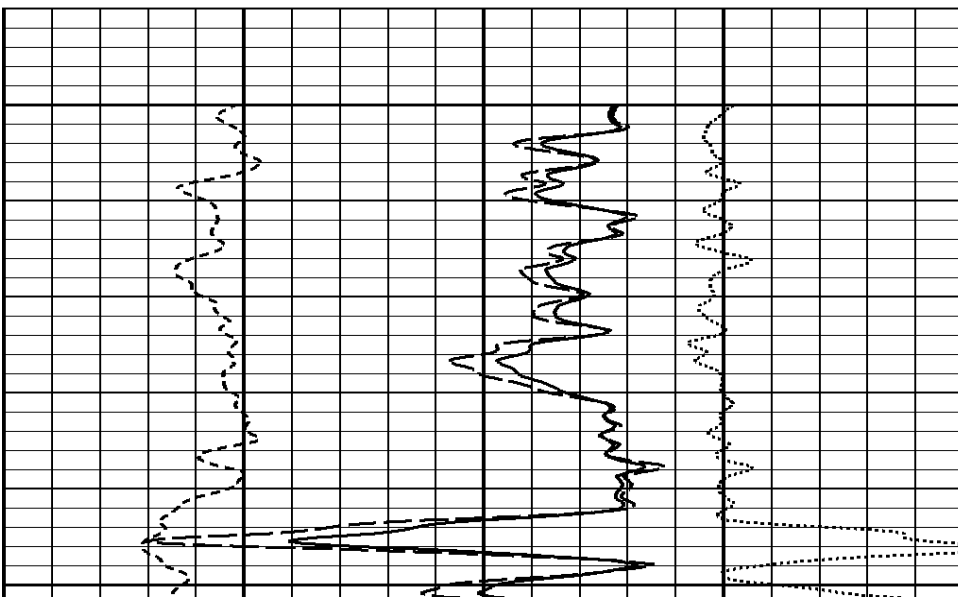
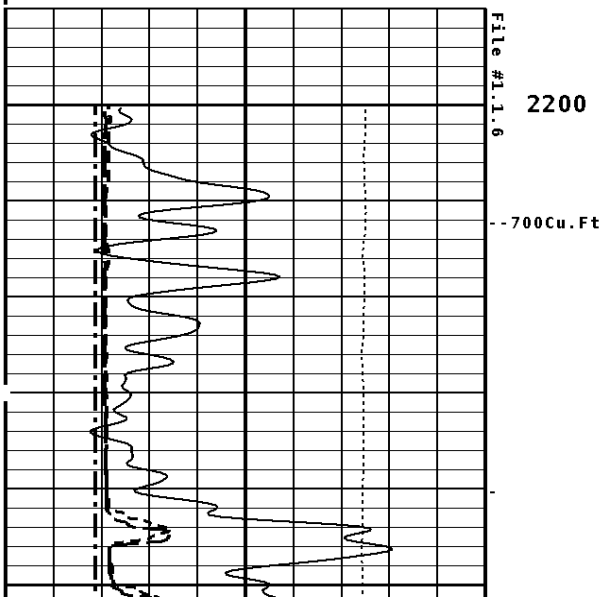
**DENSITY POROSITY
PERCENT (2.71 g/cc)**

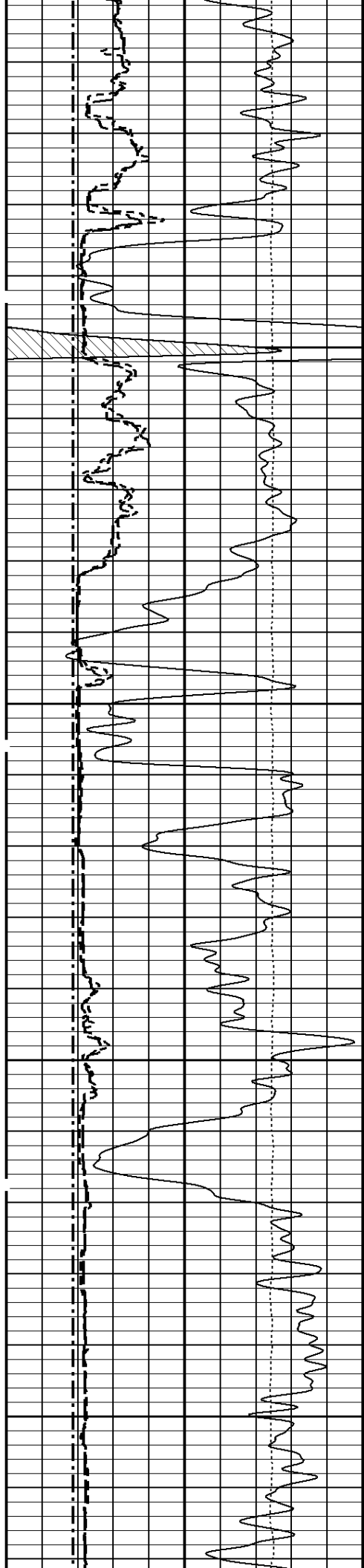
70 30
30 -10
-10 -50

**COMPENSATED BULK DENSITY
G/CC**

3.0 4.0
2.0 3.0
1.0 2.0

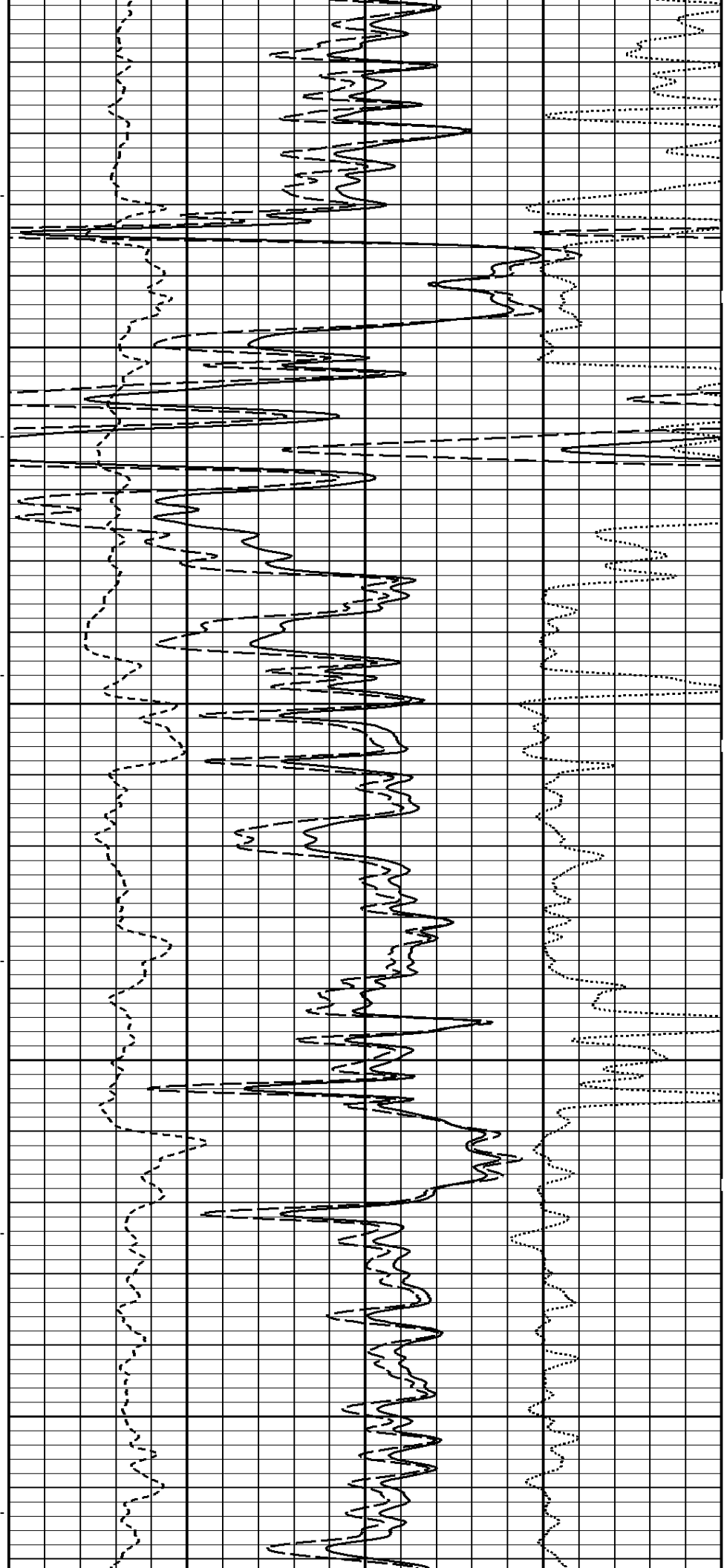
**1:240 MAIN SECTION
BULK DENSITY**

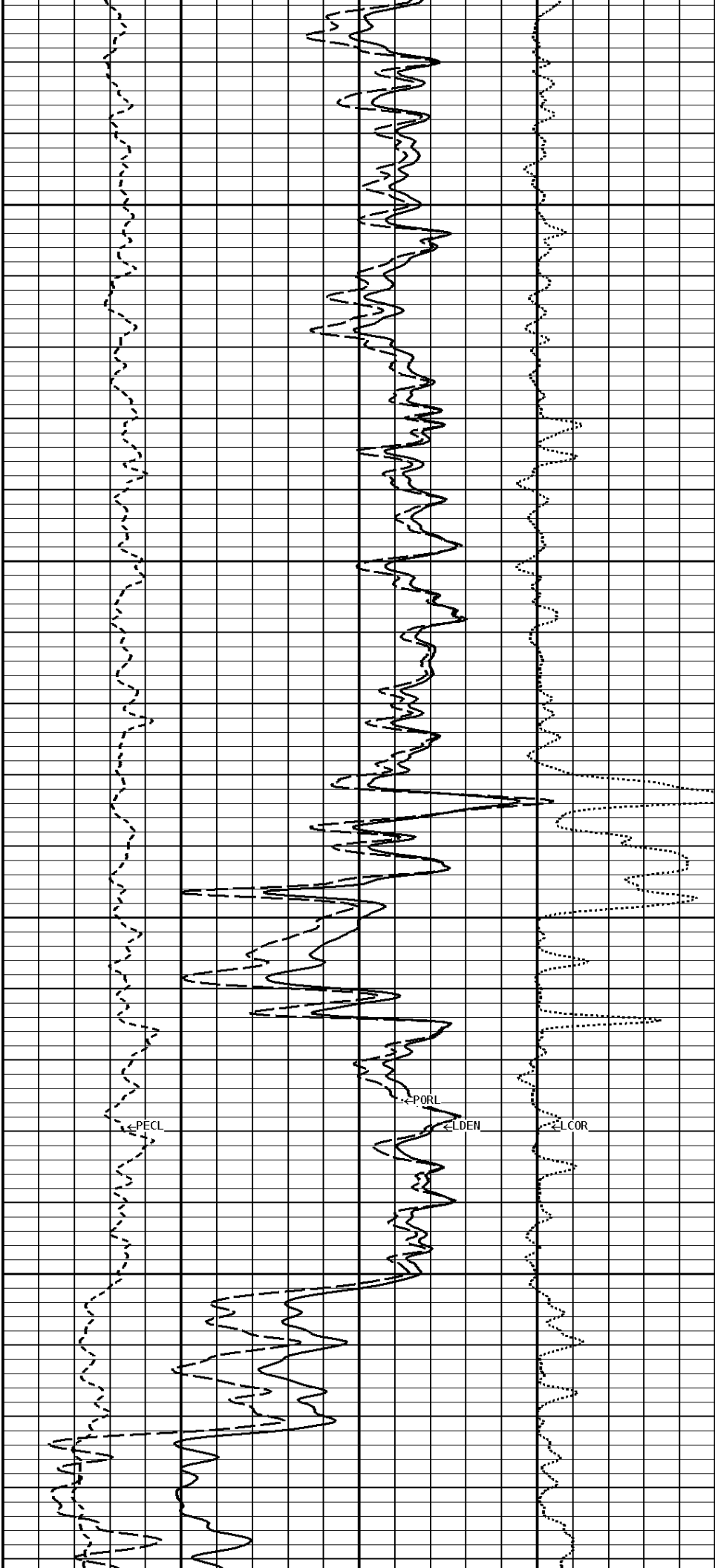
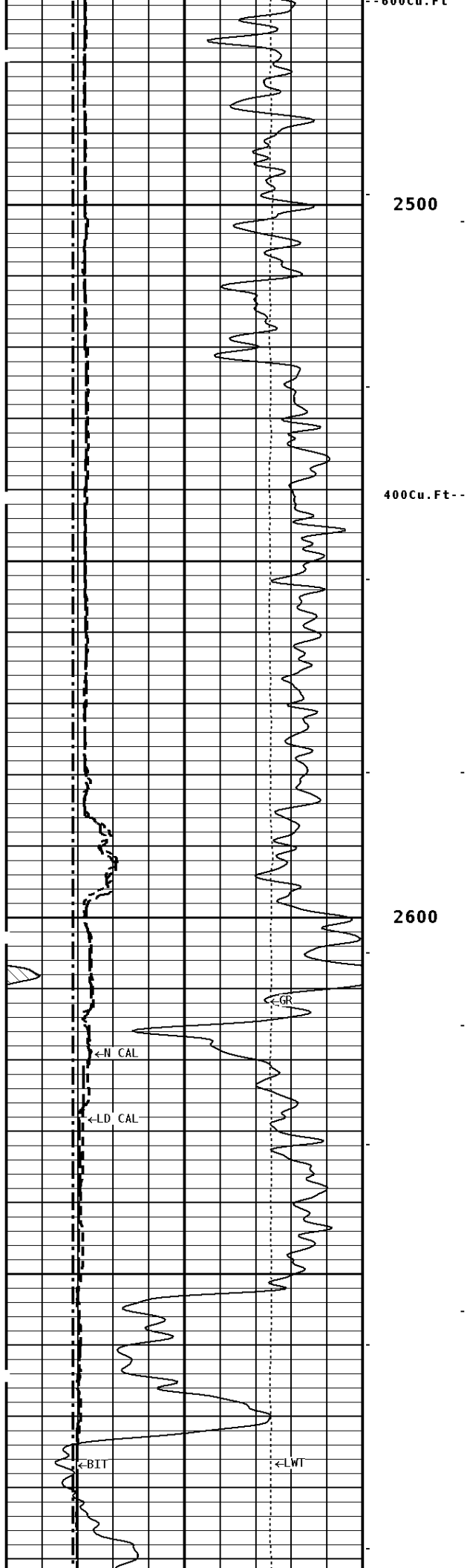


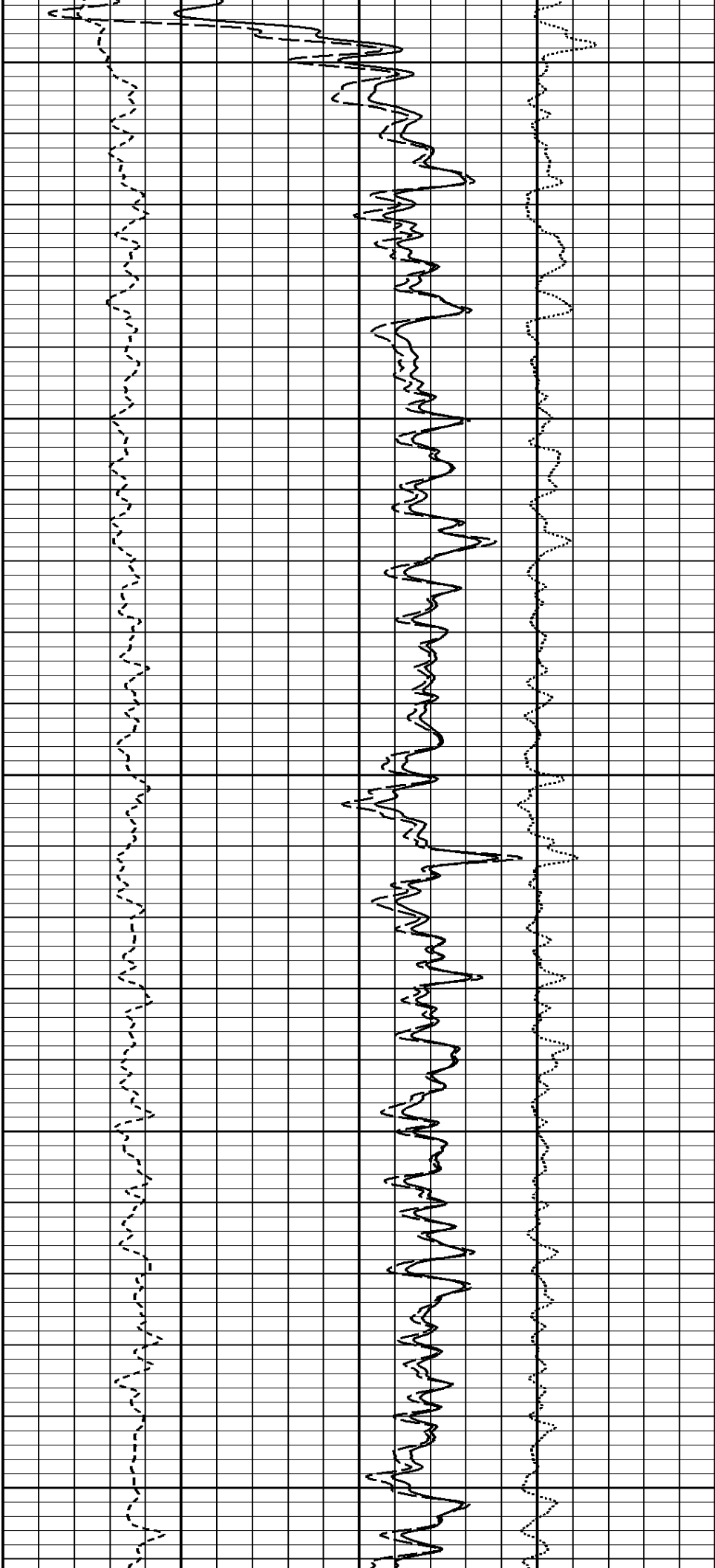
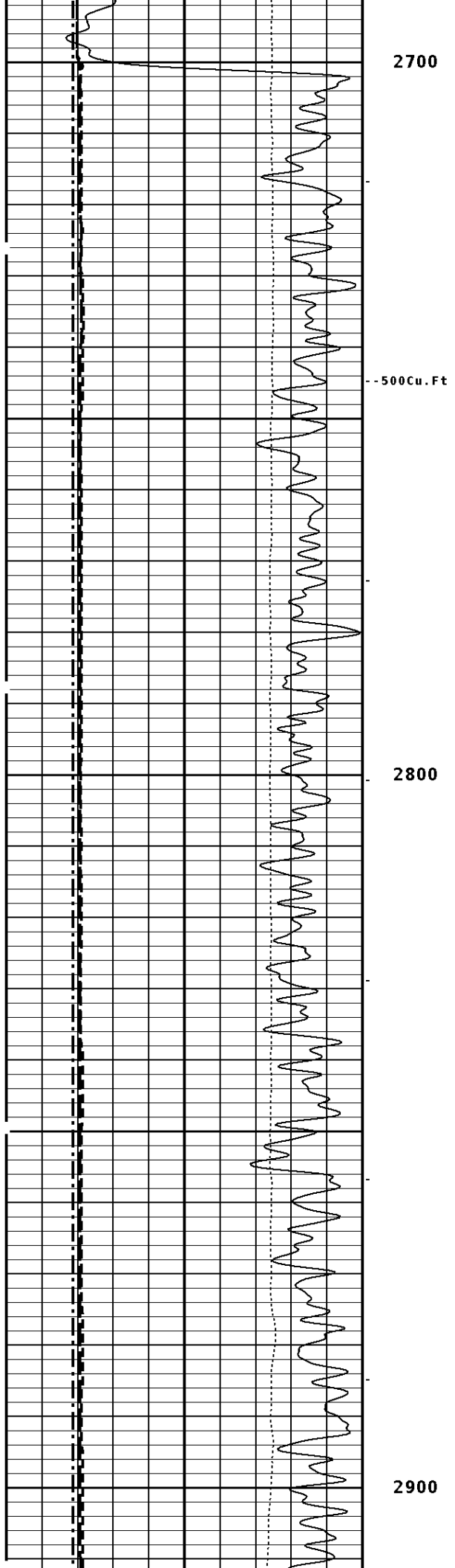


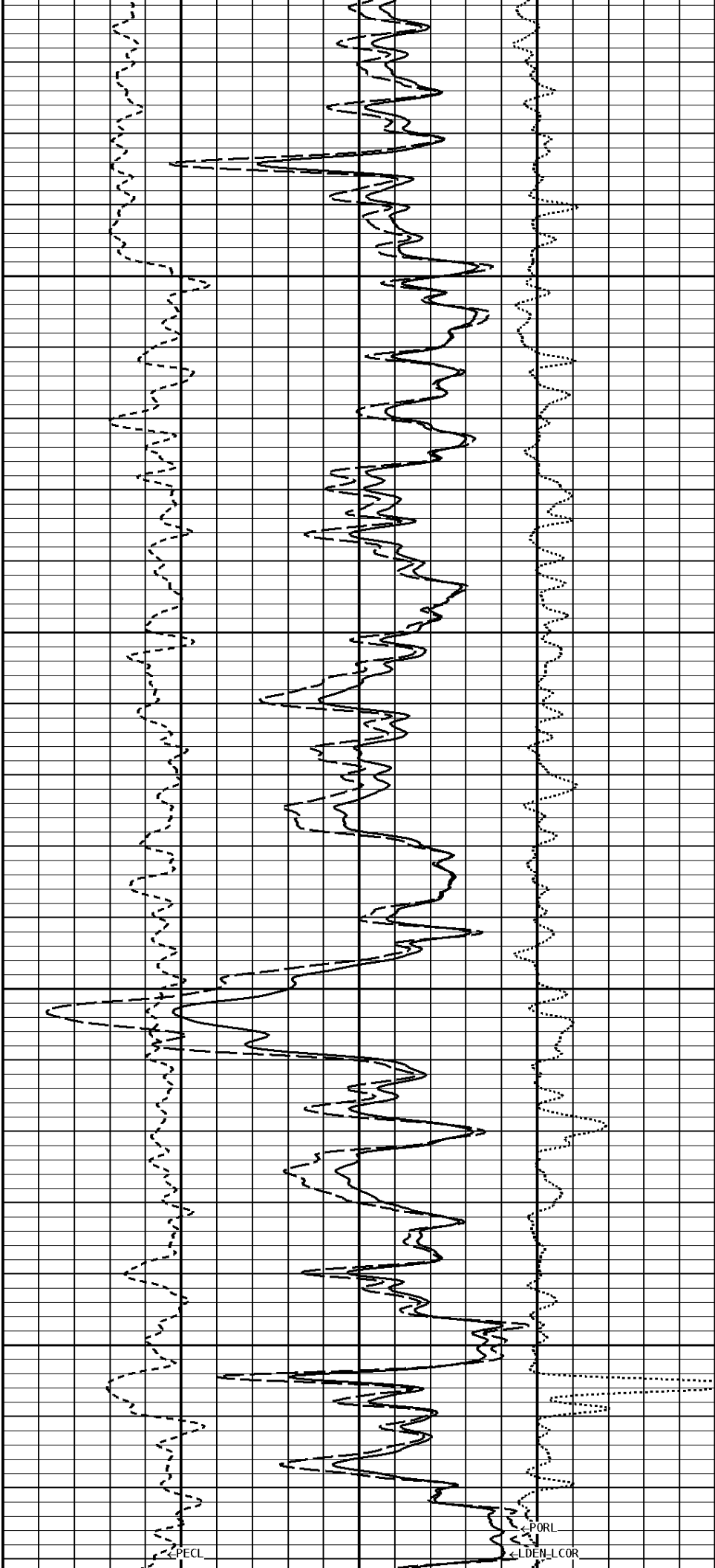
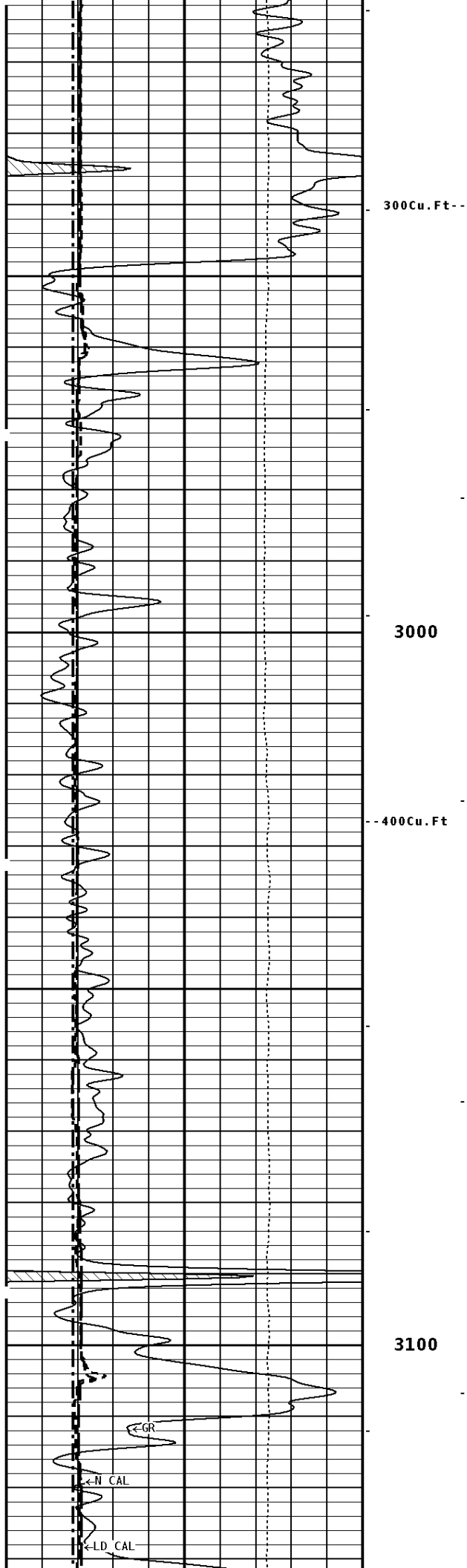
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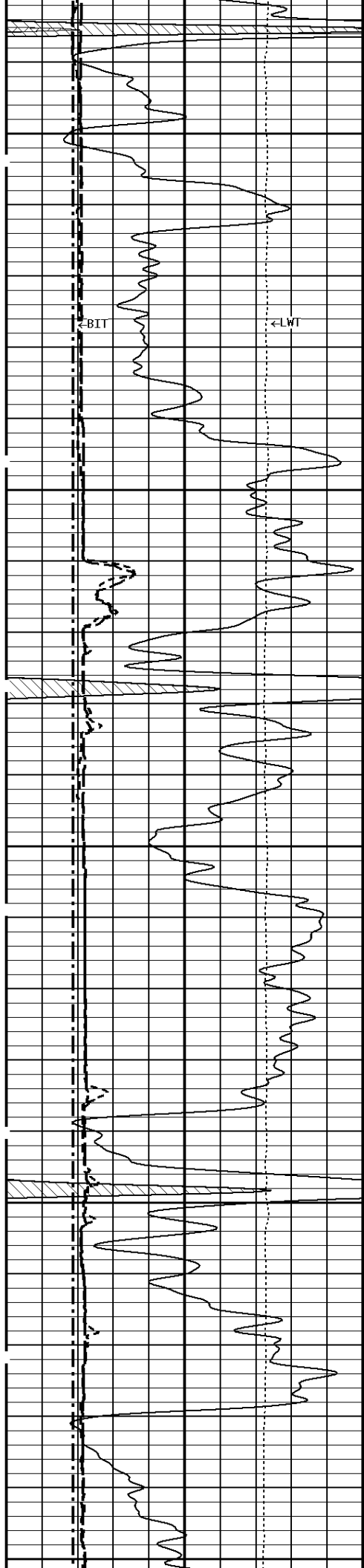
2400









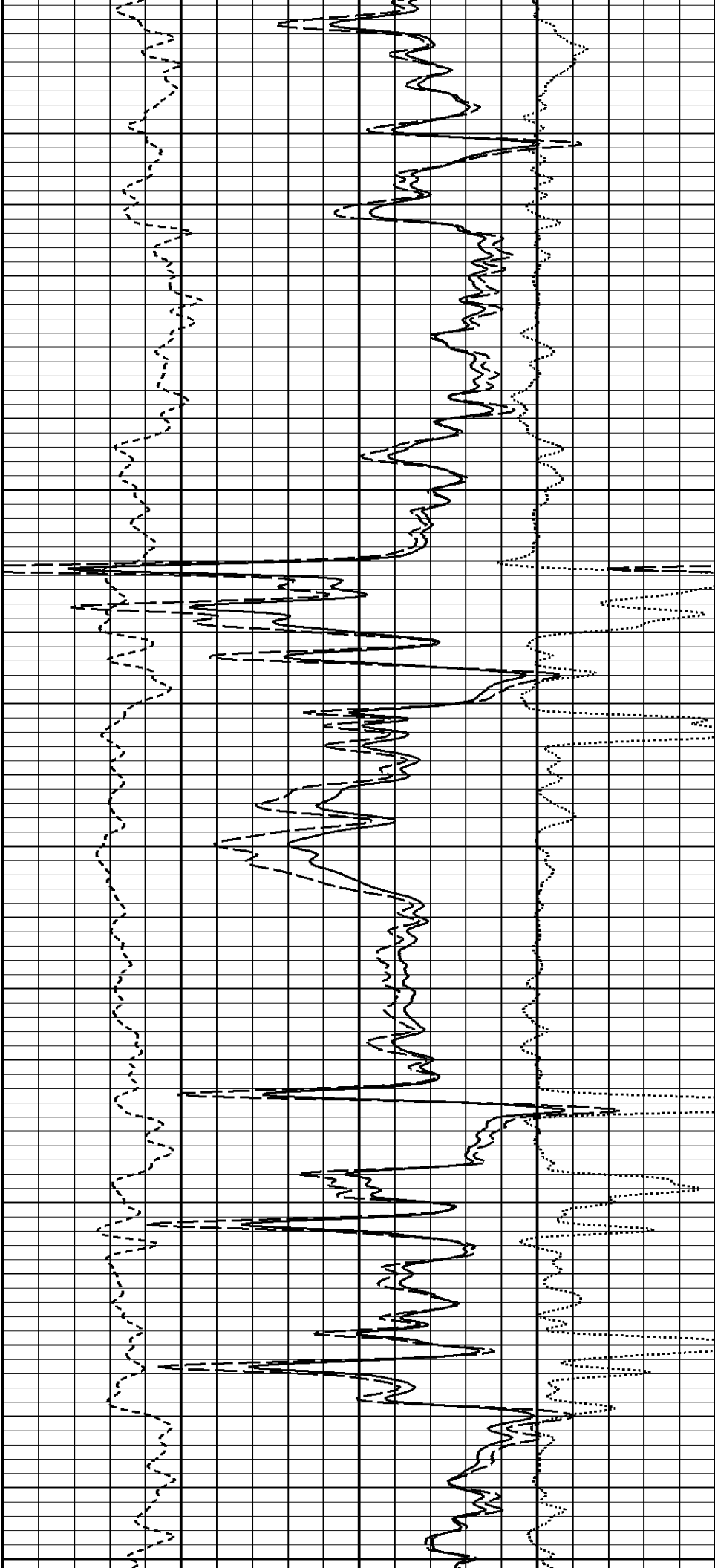


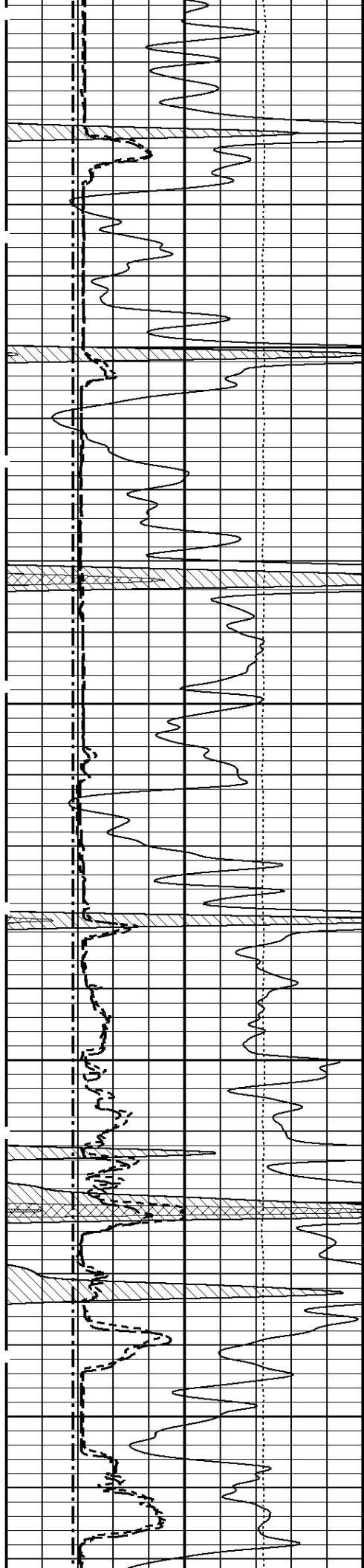
3200

3300

--300Cu.Ft--

200Cu.Ft--

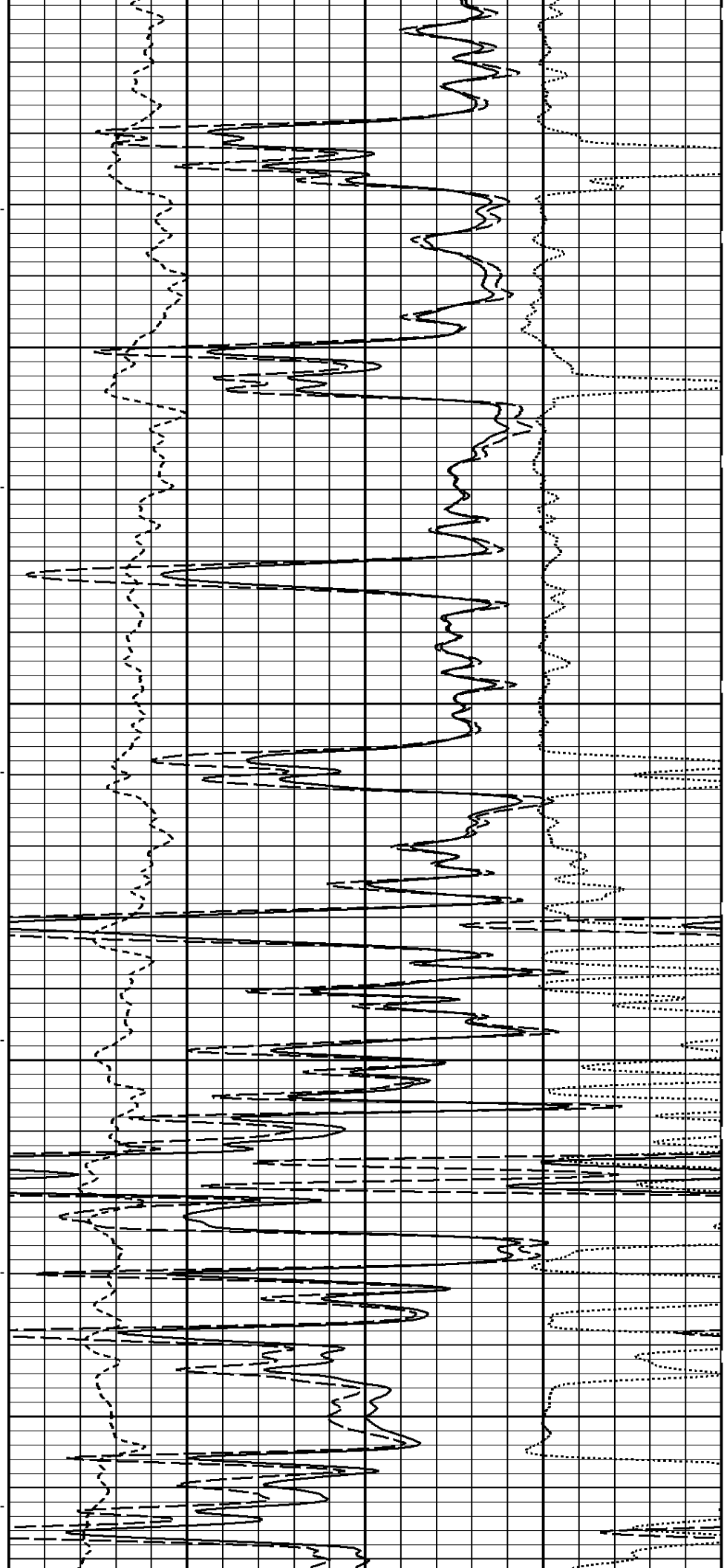


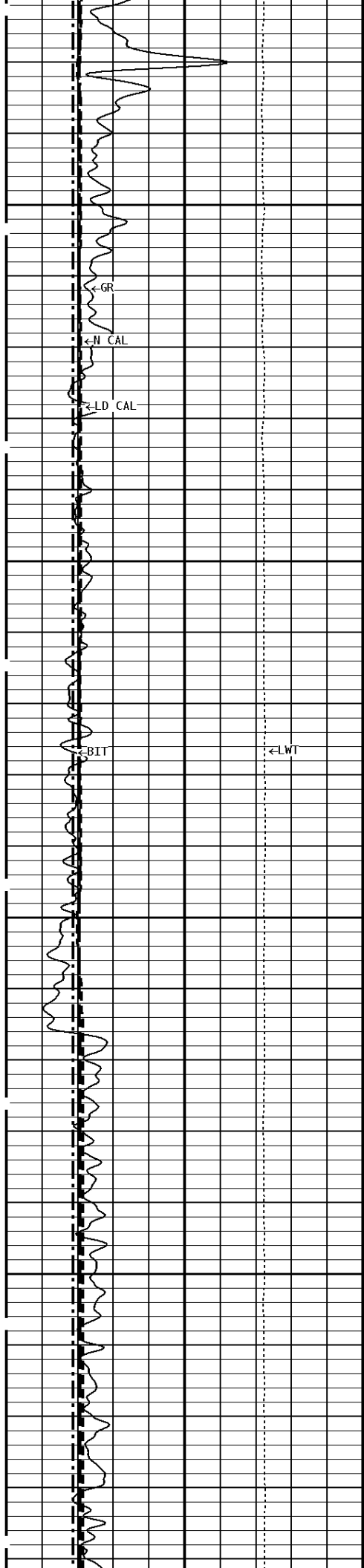


3400

3500

--200Cu.Ft

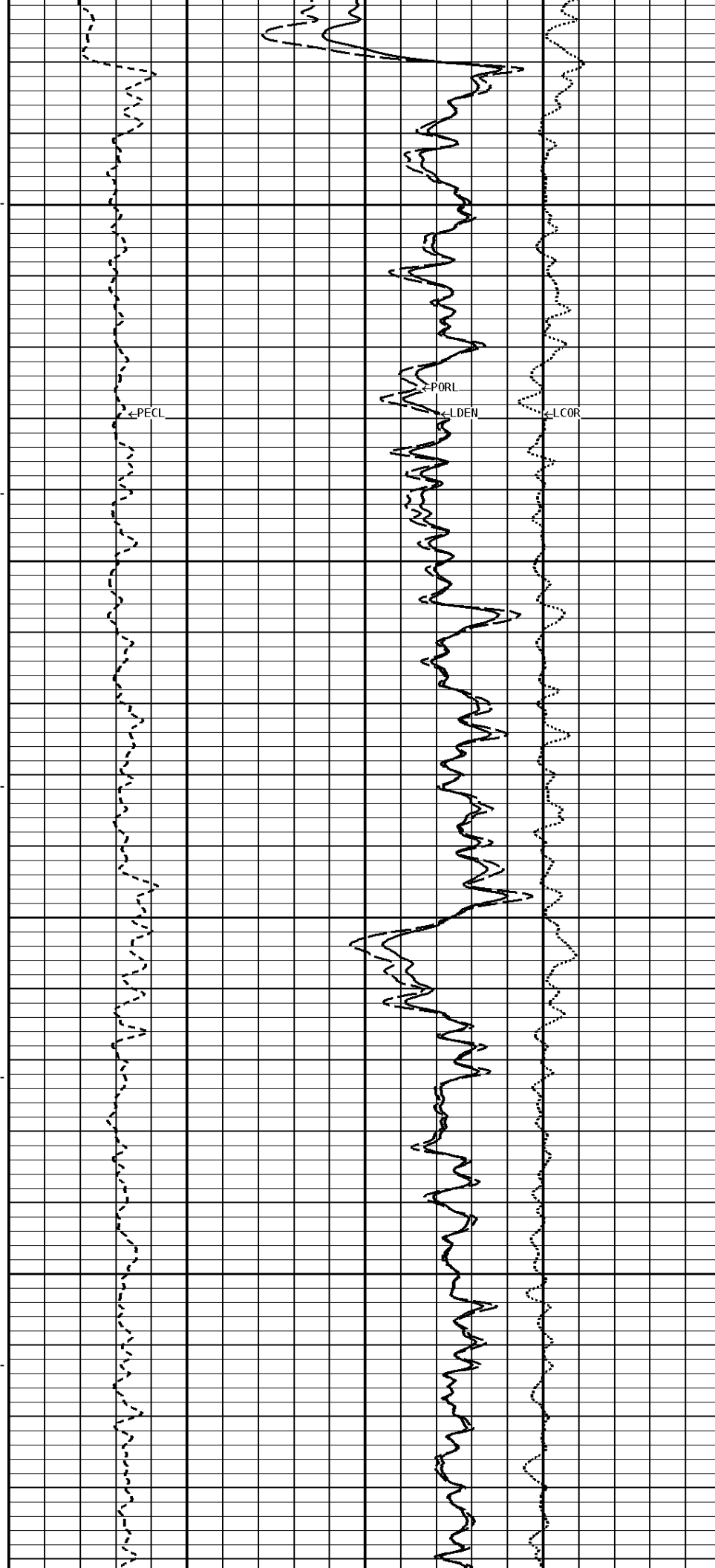


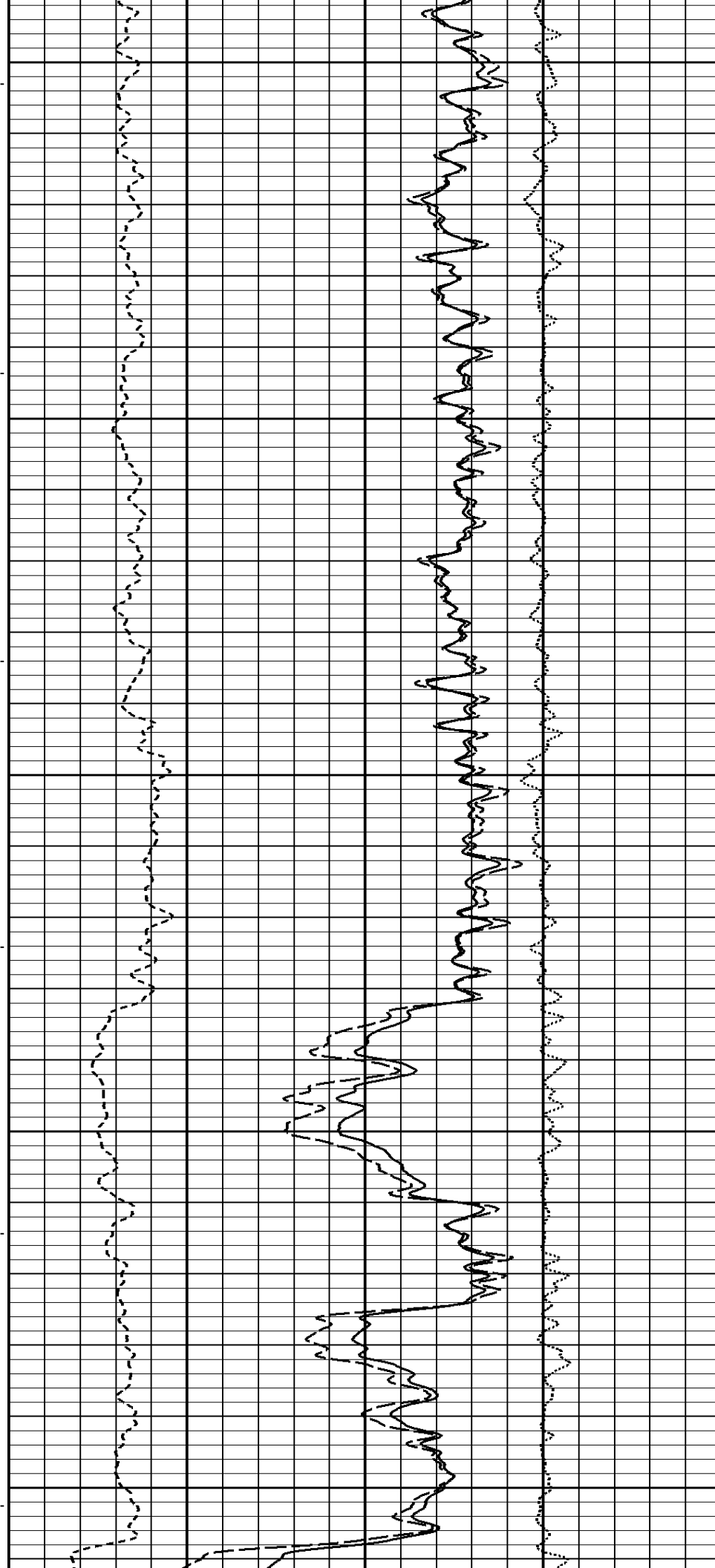
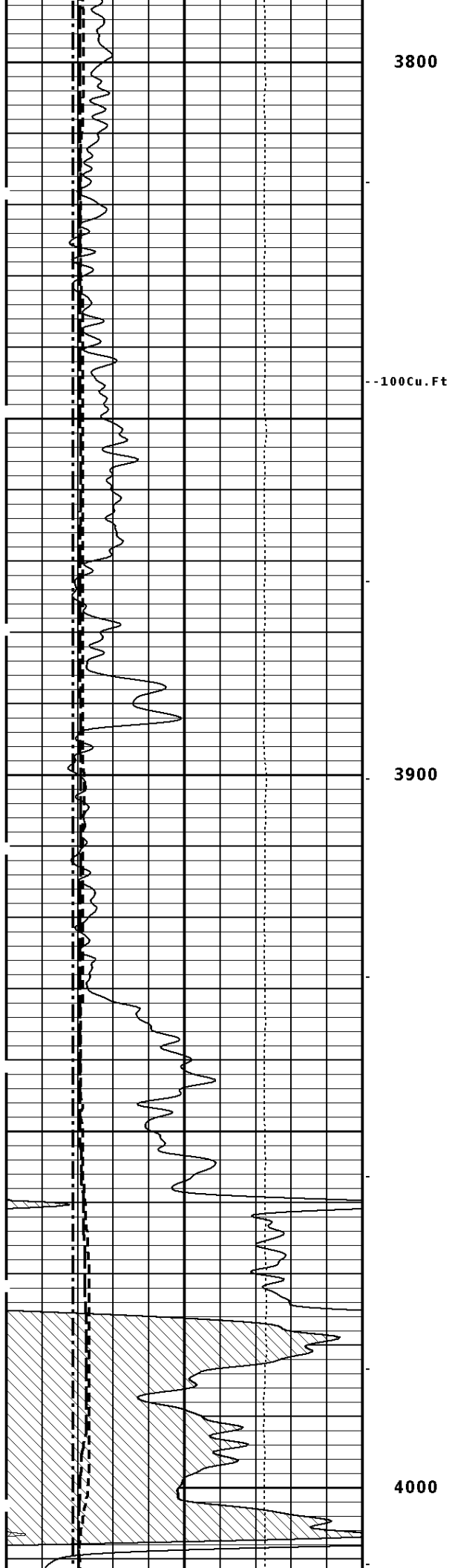


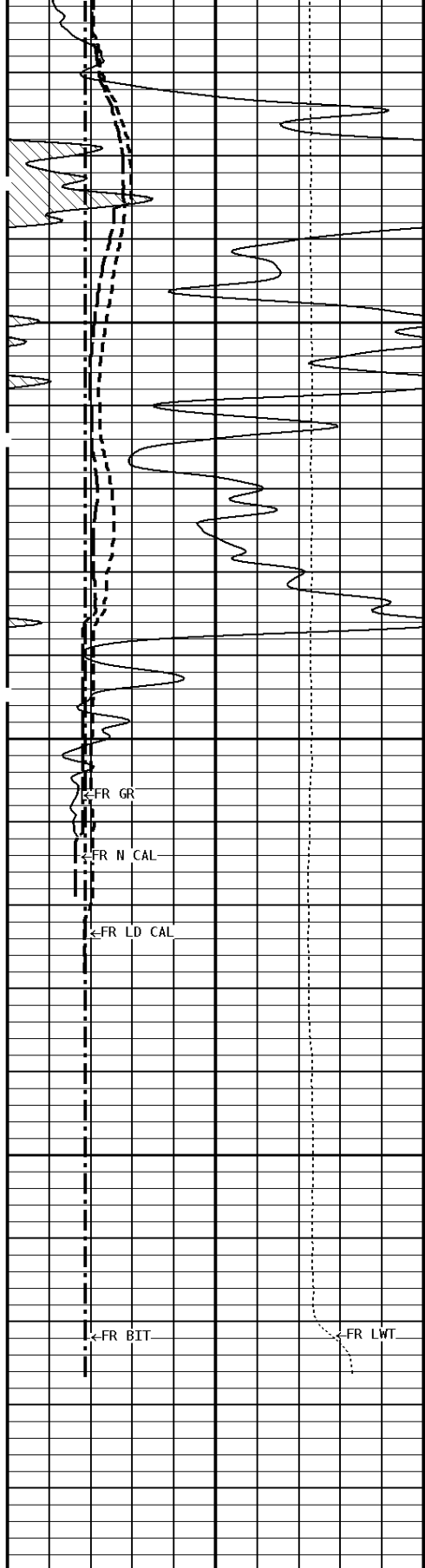
3600

3700

100Cu.Ft--



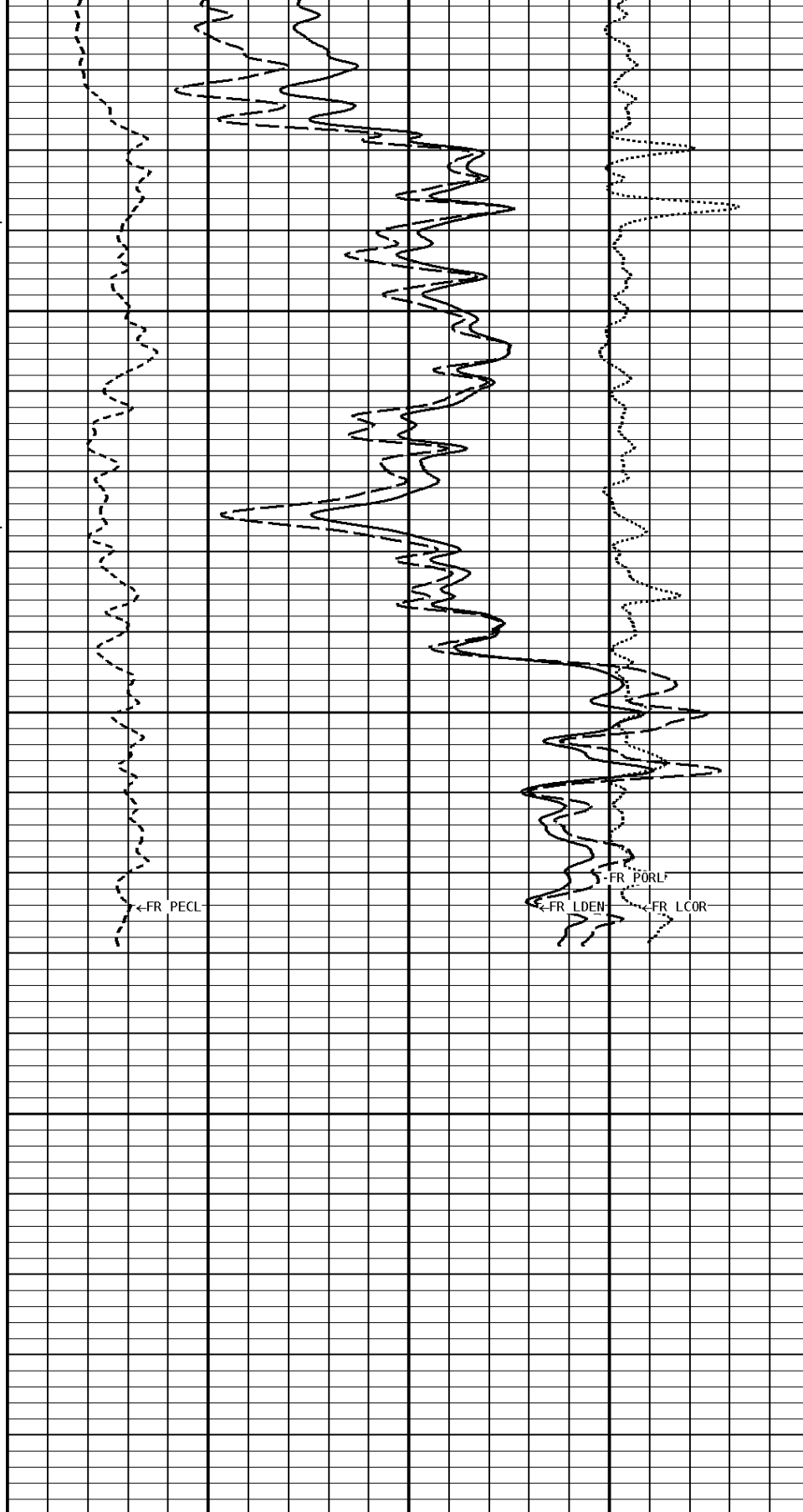




4100

4172

1:240 MAIN SECTION BULK DENSITY



GAMMA RAY
API UNITS

150 300

-BNV ANV-
CU.FT

3.0

COMPENSATED BULK DENSITY
G/CC

4.0

0	150
NEUTRON (Y) CALIPER INCHES (IN)	
16	26
6	16
DENSITY (X) CALIPER INCHES (IN)	
16	26
6	16
BIT SIZE INCHES (IN)	
6	16
TENSION LBS	
10000	0

2.0	3.0
1.0	2.0
DENSITY POROSITY PERCENT (2.71 g/cc)	
70	30
30	-10
-10	-50
PE CROSS-SECTION BARN/ ELECTRON	
0	10
-0.25	0.25

*** Borehole Zone Factors ***

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	4.500	in	
Casing Correction (PHI N)	Disable		

*** Calibration Summary ***

Shop Calibration GRT-B					
Performed : 15-MAY-2011			Time : 08:17		
Sensor Suite : GR-GR5			ID : GRT-BA-121		
	Measured	Units	Calibrated	Units	
GR	Background	Jig	Jig		
	50	360	175	GRAPI	
Shop Calibration CNT-AA					
Performed : 00-XXX-0000			Time : 00:00		
Sensor Suite : CALI-BCN			ID : NDT-CB-152		
	Jig - Measured		Jig - Calibrated	Units	
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	7.8	13.9	6.0	12.0	IN.
Shop Calibration LDT-DA					
Performed : 15-Apr-2011			Time : 11:02		
Sensor Suite : BHC NEUT			ID : CNP-AA-111		
Source ID : N-1044					
	Tank		Verification	Units	
	Measured	Calibrated	Jig		
N/F	3.6545	3.6893	3.6824		
Porosity	20.0	20.5	20.4	%	
Shop Calibration LDT-DA					
Performed : 15-MAY-2011			Time : 08:26		
Sensor Suite : CALI-LTH			ID : PDT-GA-465		
	Jig - Measured		Jig - Calibrated	Units	
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	5.4	11.4	6.0	12.0	IN.
Shop Calibration LDT-DA					
Performed : 22-Apr-2011			Time : 10:29		
Sensor Suite : BHCPELNG			ID : LDP-DA-065		
Source ID : CSV-587					
	Short Space				
BKGD	Al	Mg	Al+Fe	Units	
71	100	700	200		

LSW1	71	486	788	331	CPS
LSW2	77	585	930	432	CPS
LSW3	282	1412	2205	1214	CPS
LSW4	344	1308	1812	1172	CPS
LSW5	31	40	41	39	CPS
LSW6	92	96	94	94	CPS
LSW7	58	60	60	59	CPS
LSW8	2	2	3	2	CPS
QS	0.223	0.236	0.225	0.228	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

Long Space					
	BKGD	Al	Mg	Al+Fe	Units
LLW1	100	562	2297	363	CPS
LLW2	111	939	3825	692	CPS
LLW3	422	1868	6837	1633	CPS
LLW4	551	1115	2889	1042	CPS
LLW5	61	66	79	65	CPS
LLW6	168	171	165	171	CPS
LLW7	112	111	111	110	CPS
LLW8	4	6	11	5	CPS
QL	0.202	0.214	0.198	0.216	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC

Shop Calibration					
MST-DA					
Performed : 15-MAY-2011			Time : 08:20		
Sensor Suite : CALI-MSN			ID : MST-NG-26		
Jig - Measured			Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
CL # 1	6.3	12.3	6.0	12.0	IN.

Performed : 01-MAY-2007			Time : 10:03		
Sensor Suite : MSTDA-NI			ID : MST-NG-26		
Internal					
	Measured			Calibrated	
	Zero	Reference	Units	Zero	Reference
INV-V	150.0	30325.6		0.00	1546.00
NOR-V	150.0	30476.3		0.00	1585.00
IN-C	150.0	60152.2		0.00	15.46
INV-R				32.34	OHMM
NOR-R				55.11	OHMM

Performed : 00-XXX-0000			Time : 00:00		
Sensor Suite : MSTDAMSF			ID : MST-NG-26		
Internal					
	Measured			Calibrated	
	Zero	Reference	Units	Zero	Reference
MSFC	150.0	58600.0		0.00	1522.00
MSFB	32800.0	62500.0		0.00	1522.00
MOM1	150.0	5950.0		0.00	1522.00
MSFRA				43.30	OHMM