

Tucker
ENERGY SERVICES

COMPENSATED NEUTRON

PEL DENSITY LOG

Company: RUNNING FOXES PETROLEUM
Well: DICKERSON #10-22C-3
Field: BRONSON-XENIA
County: ALLEN
State: KANSAS
Country: USA
API No.: 15-001-30365-00-00

File No.: TUL-57694
Company: RUNNING FOXES PETROLEUM INC.
Well: DICKERSON #10-22C-3
Field: BRONSON-XENIA
County: ALLEN
State: KANSAS
Country: USA
API No.: 15-001-30365-00-00

Location:
1485' FSL & 2475' FEL
SW SW NW SE

LSD: Sect: 22 Twp: 24S Rge: 21E

Permanent Datum:	GL	Elevations:		Services:	
Drilling Measured From:	GL	KB	0.00	CNT	
Log Measured From:	GL	DF	0.00	LDT	
Above Permanent Datum:	0.00 Ft	GL	1103.00	PLT	
Date	2012-04-30				
Run Number	1				
Depth--Driller	941.0	Ft			
Depth--Logger	940.0	Ft			
First Reading	917.0	Ft			
Last Reading	21.0	Ft			
Casing--Driller	21.0	Ft			
Casing--Logger	21.0	Ft			
Bit Size	6.750	In			
Casing Size	8.625	In			
Hole Fluid Type	FRESH				
Density	0.0 LBS/GAL				
Fluid Loss	0.0 CC				
PH/Viscosity	0.0 @ 0.0 SEC				
Sample Source	MEASURED				
RM@Measured Temp.	10.000	@ 73	F		
RMF@Measured Temp	8.500	@ 73	F		
RMC@Measured Temp.	11.500	@ 73	F		
Source RMF/RMC	CALCULATED/CALCULATED				
RM@BHT	8.900	@ 83	F		
Time Circulation Stopped					
Max Recorded Temp.	83	F			
Equipment/Base	TRUCK 119	TULSA			
Recorded By	R. FRANKLIN				
Witnessed By	K. HODGES				

The customer is hereby warned that by providing the log data herein, T. E. S. does not agree to provide any interpretation of log data, conversion of log data to physical rock parameters or recommendations. T. E. 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. E. 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. E. 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)
6.750	941.00	8.625	32.00	21.00

Run Number	1	
Date	2012-04-30	
Date/Time On Bottom	2012-04-30 12:00	
Depth to Fluid	0.0	Ft
Salinity	0.000	PPM
RMF@BHT	7.500 @ 83	F
RMC@BHT	10.200 @ 83	F

Run Number 1

Comments

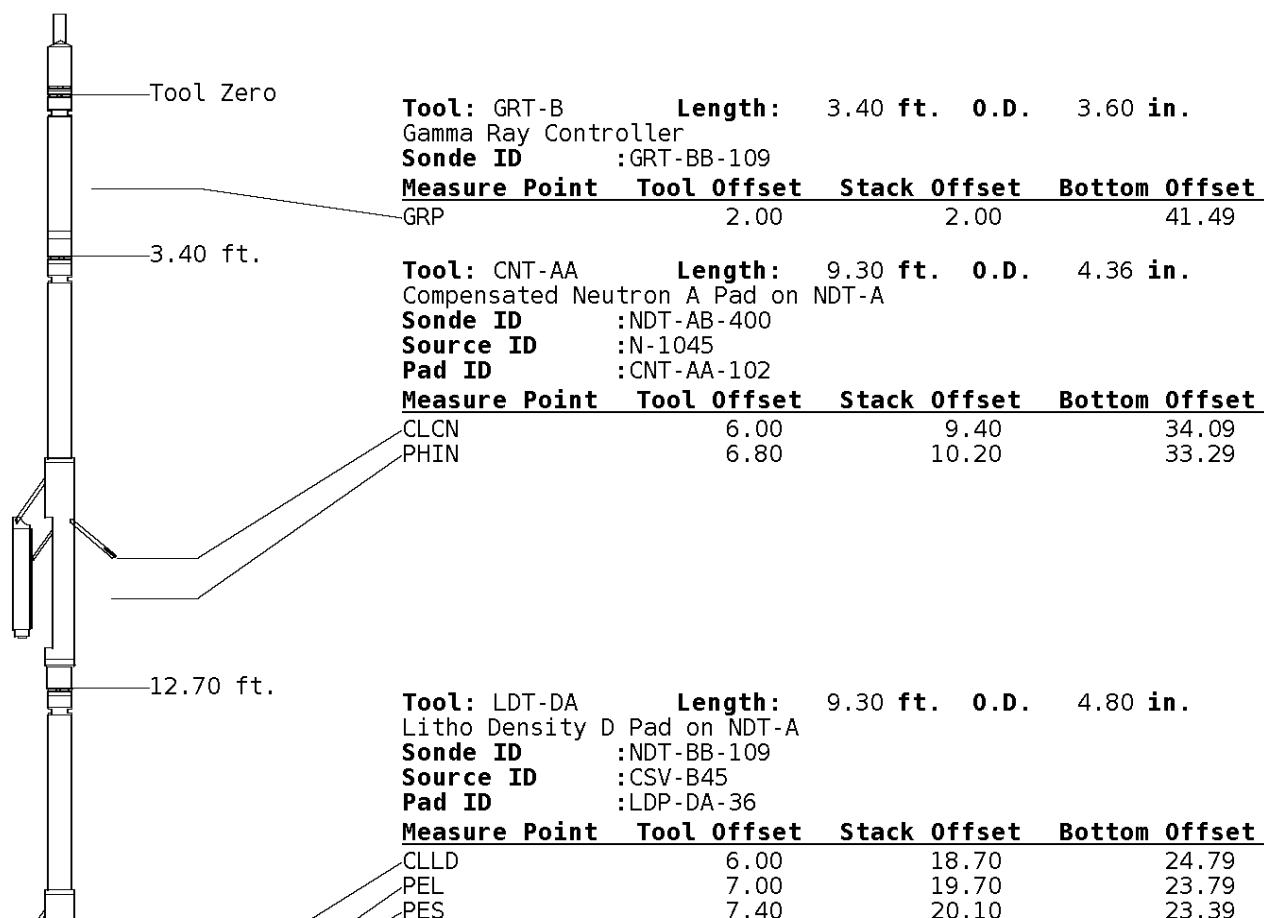
ALL PRESENTATIONS AS PER CUSTOMER REQUEST
 GRT, CNT, LDT, AND PIT RUN IN COMBINATION.
 CALIPERS ORIENTED ON X-Y AXIS.
 2.71 G/CC USED TO CALCULATED POROSITY.
 ANNULAR HOLE VOLUME CALCULATED USING 4.5" PRODUCTION CASING.
 PHIN IS CALIPER CORRECTED.

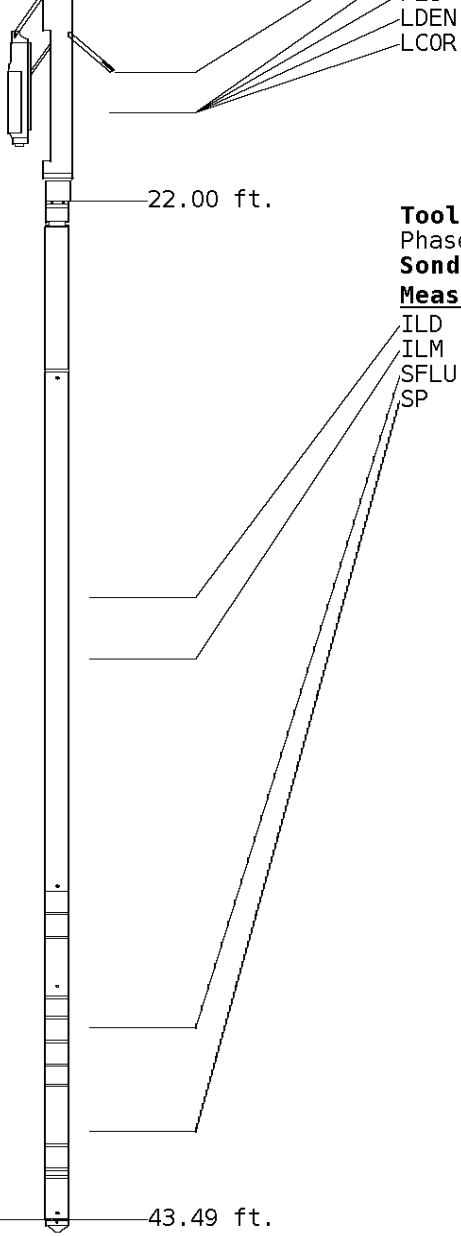
GRT: GRP.
 CNT: PHIN, CLCNIN
 LDT: PORL, LCORN, PECLN, LDENN, PORLLS, CLLDIN.
 PIT: ILD, ILM, SPU, SFLAEC

OPERATORS:
 J.THOMAS

Tool String Schematic

Total Tool Length - 43.49 ft.
Maximum Outside diameter - 4.80 in.
Net Weight in Air - 743.00 lbs.





7.20 19.90 23.59
 7.20 19.90 23.59

Tool: PIT-CA **Length:** 21.49 ft. **O.D.** 3.62 in.
 Phased Dual Induction w/ RM & D
Sonde ID :PIT-BA-20

Measure Point	Tool Offset	Stack Offset	Bottom Offset
ILD	8.92	30.92	12.56
ILM	10.10	32.10	11.39
SFLU	17.49	39.49	4.00
SP	20.60	42.60	0.88

Well File: run dic 10-22c-3 apr 30 stk

Scale: 1:240

Segment: V1.D1.S6 MAIN

Acquired: 2012-04/30 12:27 3.2.0-10932

Reference: 0

Processed: 2012-04/30 12:56 3.2.0-10932

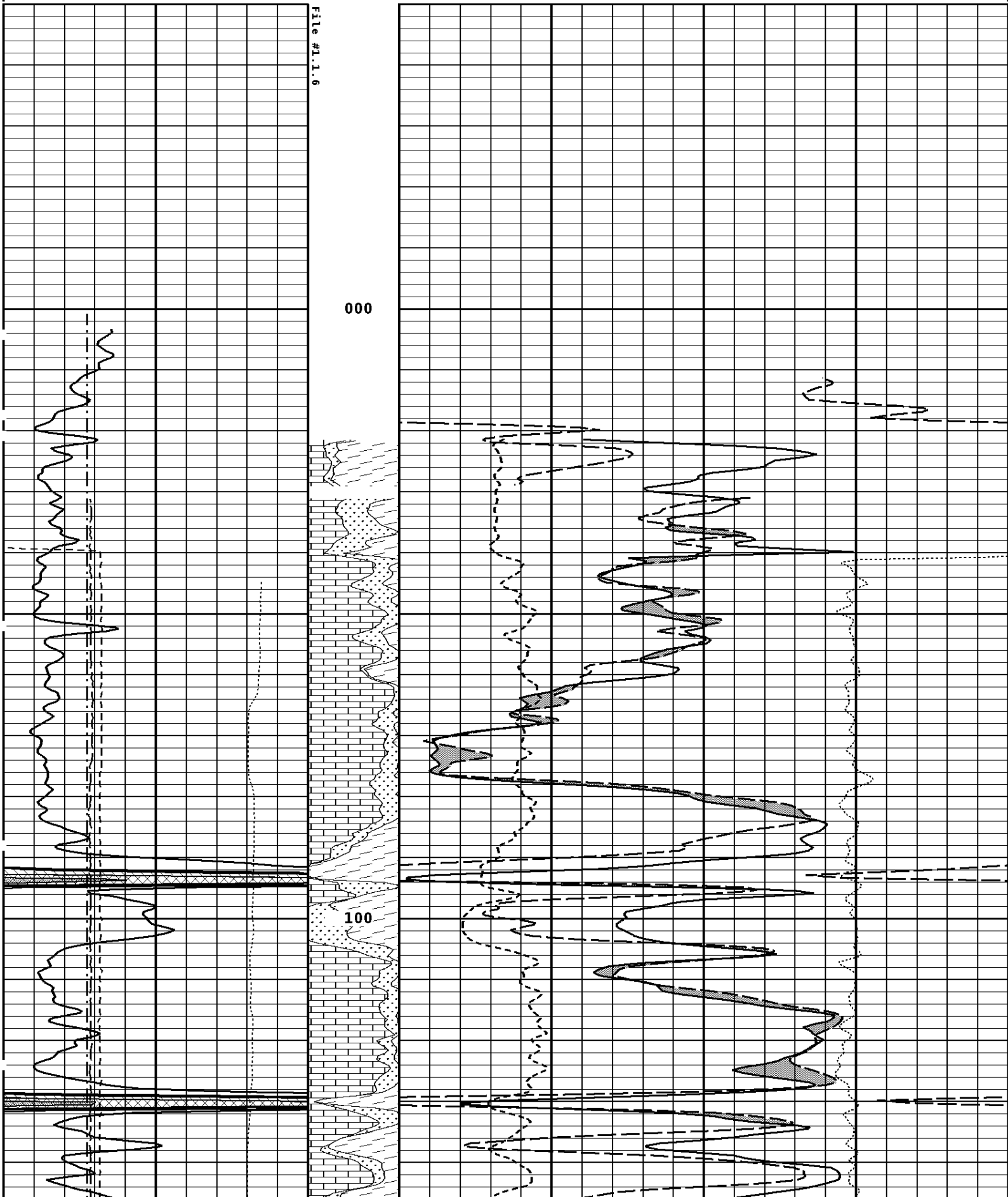
TENSION LBS			
10000	0		
BIT SIZE INCHES (IN)			
4	14		
DENSITY (X) CALIPER INCHES (IN)	Volume Quartz	PE CROSS-SECTION BARNs/ELECTRON	DENSITY CORRECTION G/CC
14	24		
4	14	0	10 -0.25 0.25
NEUTRON (Y) CALIPER INCHES (IN)	Volume Calcite	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX)	
14	24	70	30
4	14	30	-10
		-10	-50
GAMMA RAY API UNITS	Volume Dolo/Shale	DENSITY POROSITY PERCENT (2.71 g/cc)	
200	400	70	30
0	200	30	-10
		-10	-50

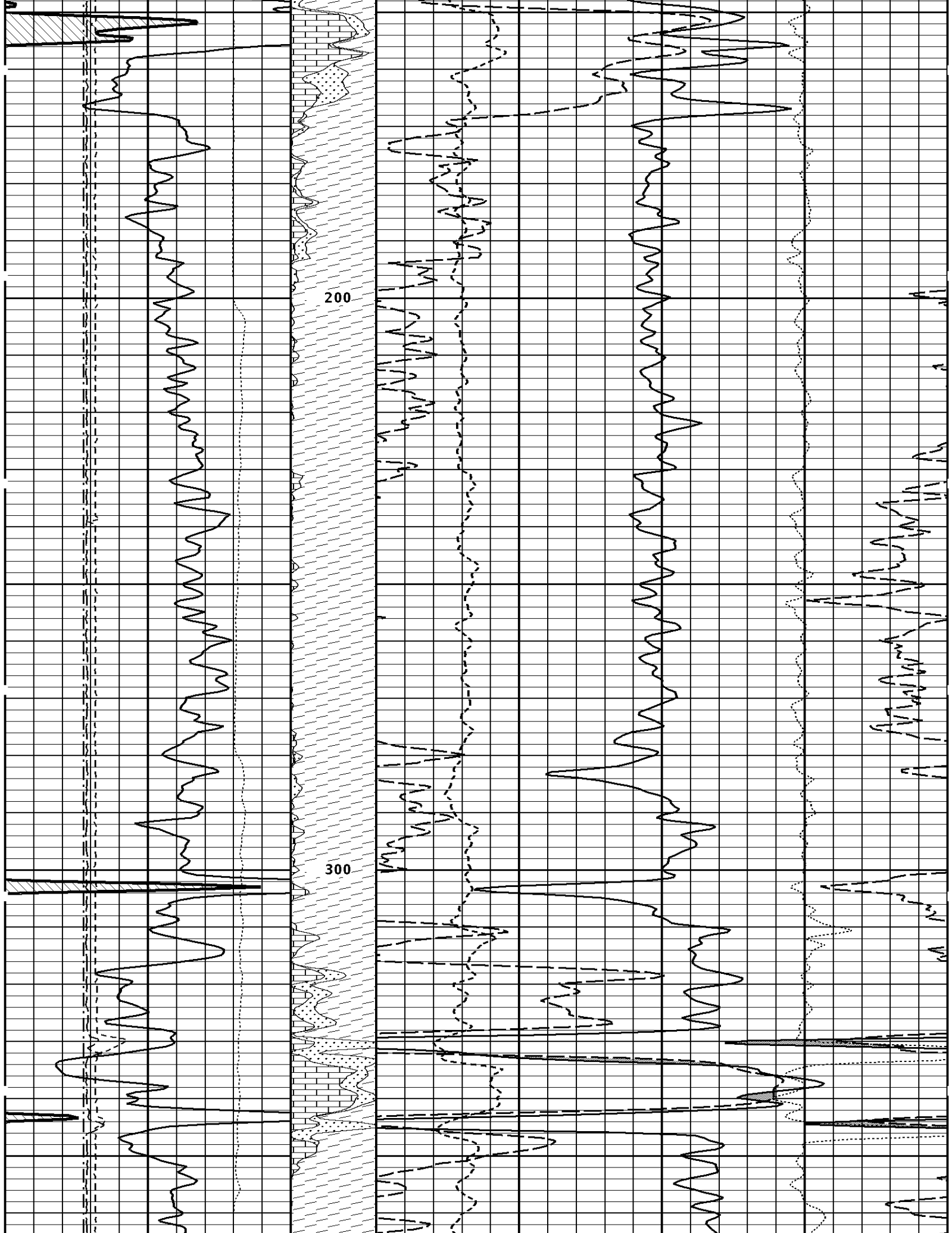
1:240 MAIN SECTION

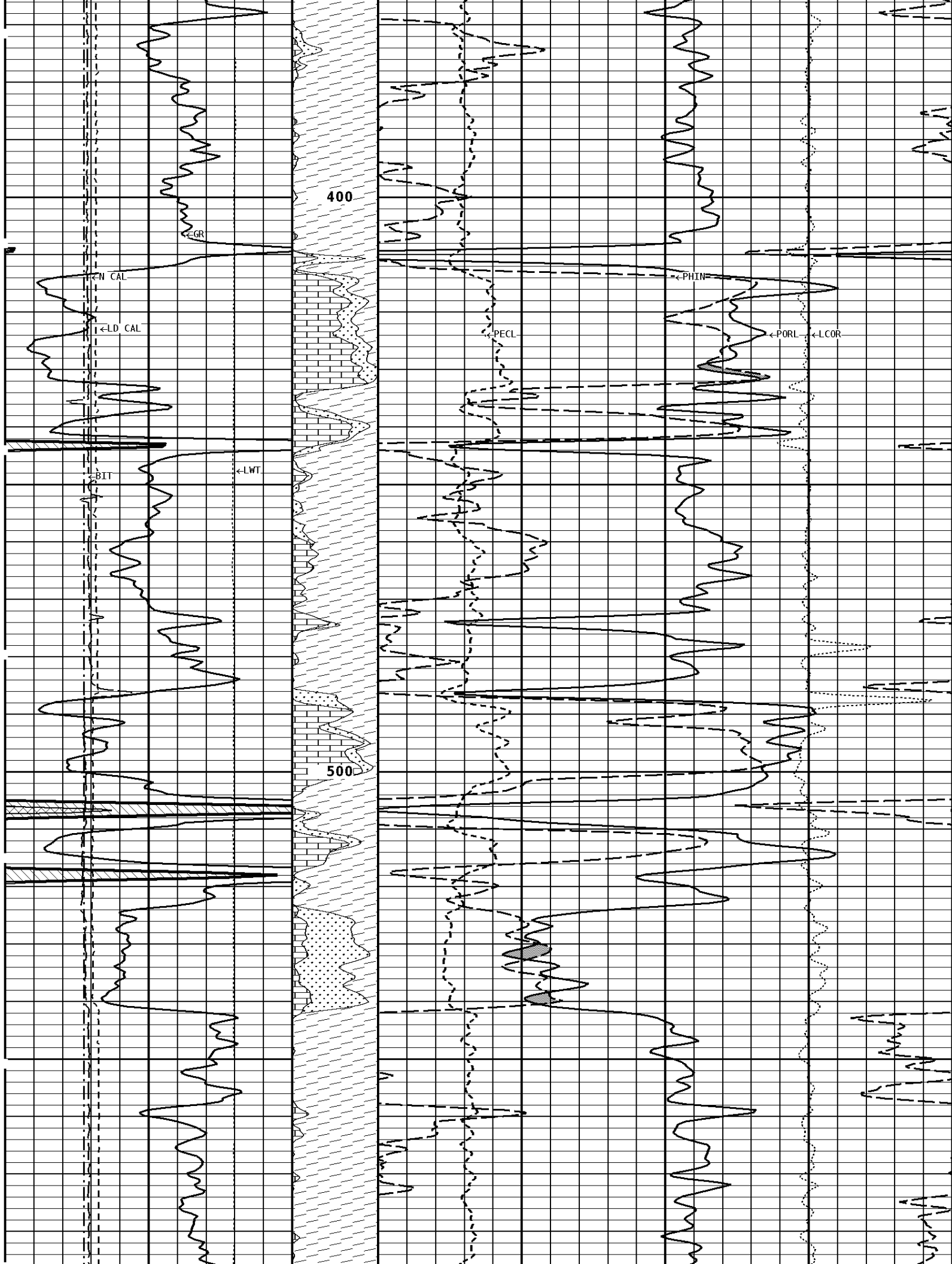
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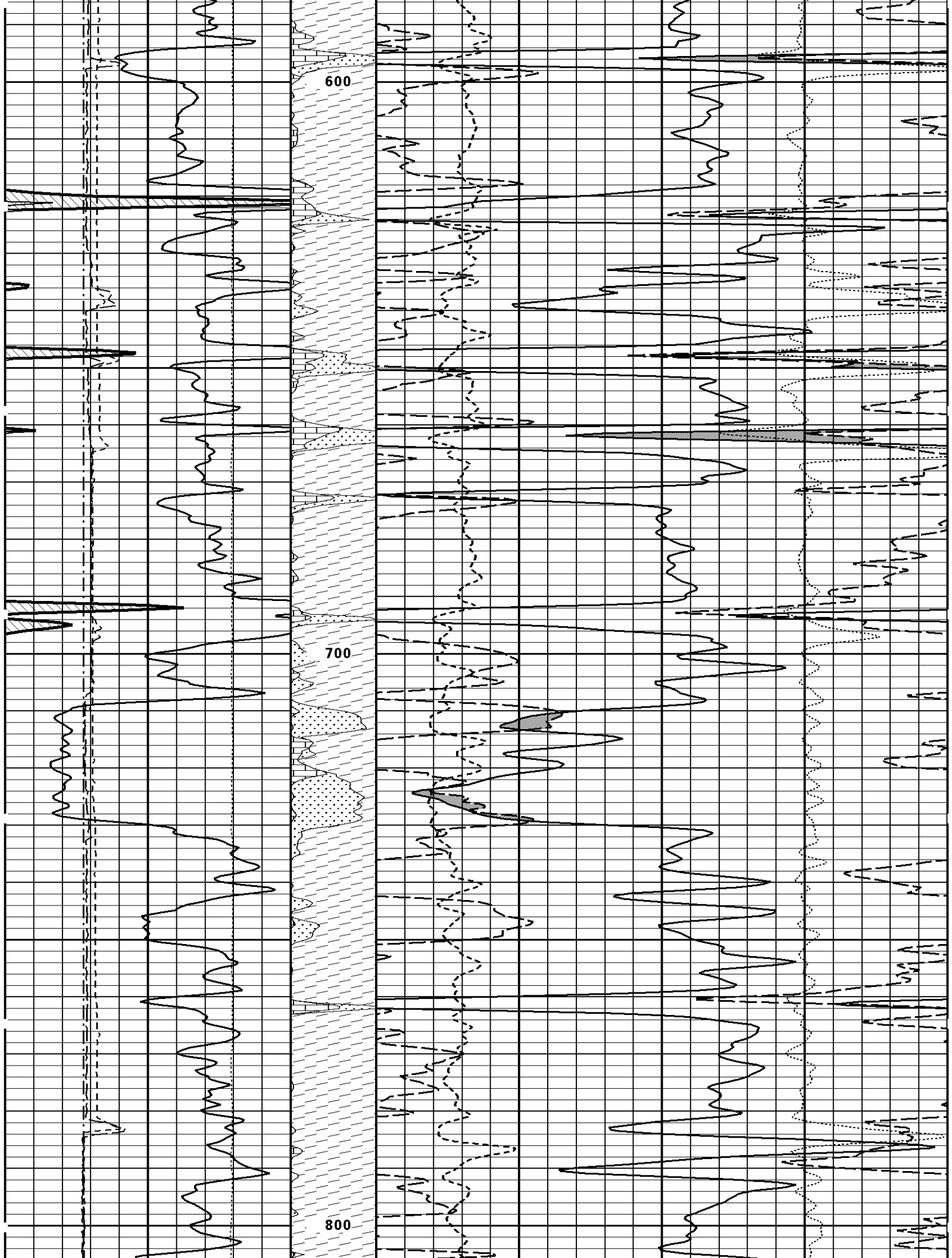
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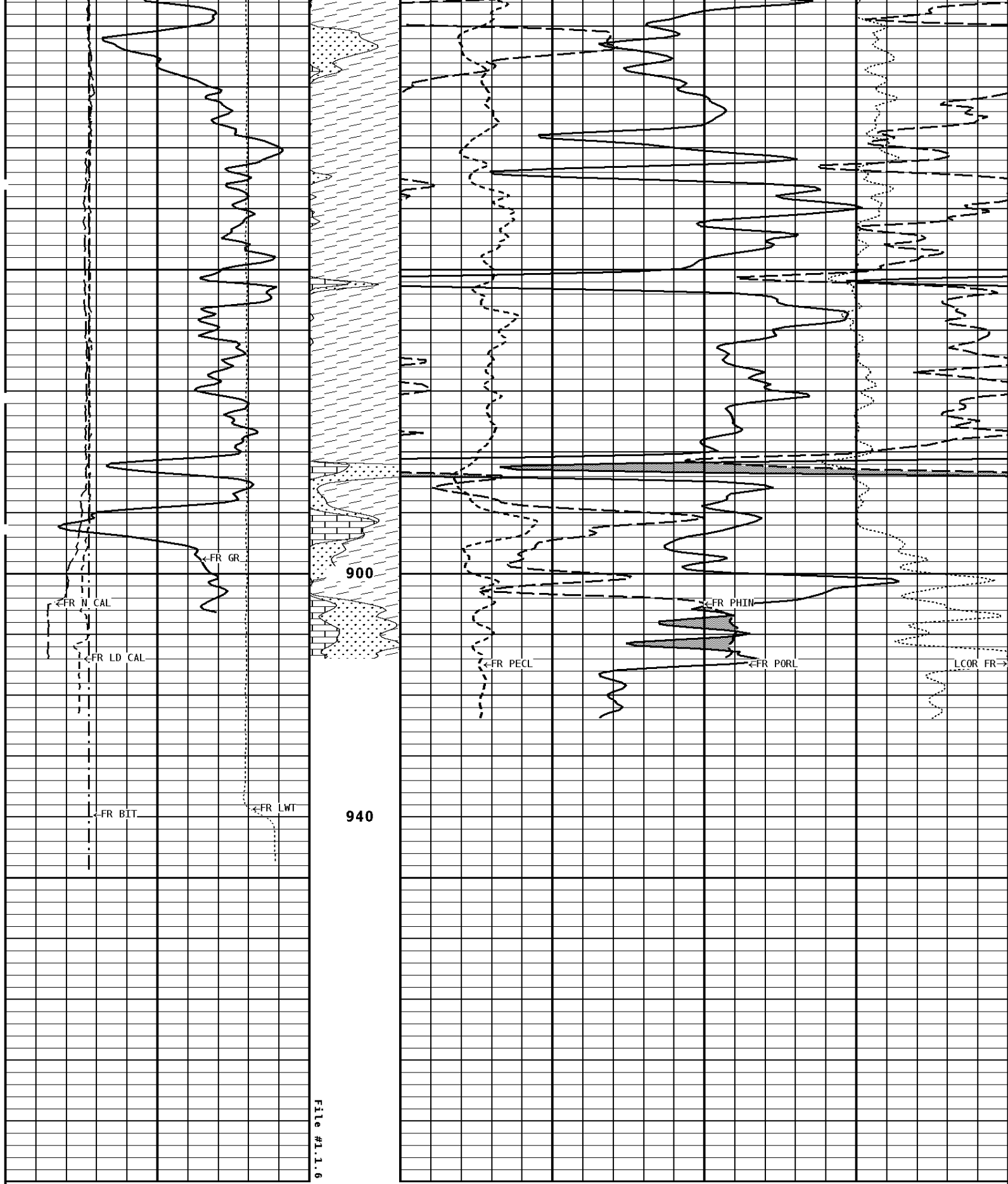
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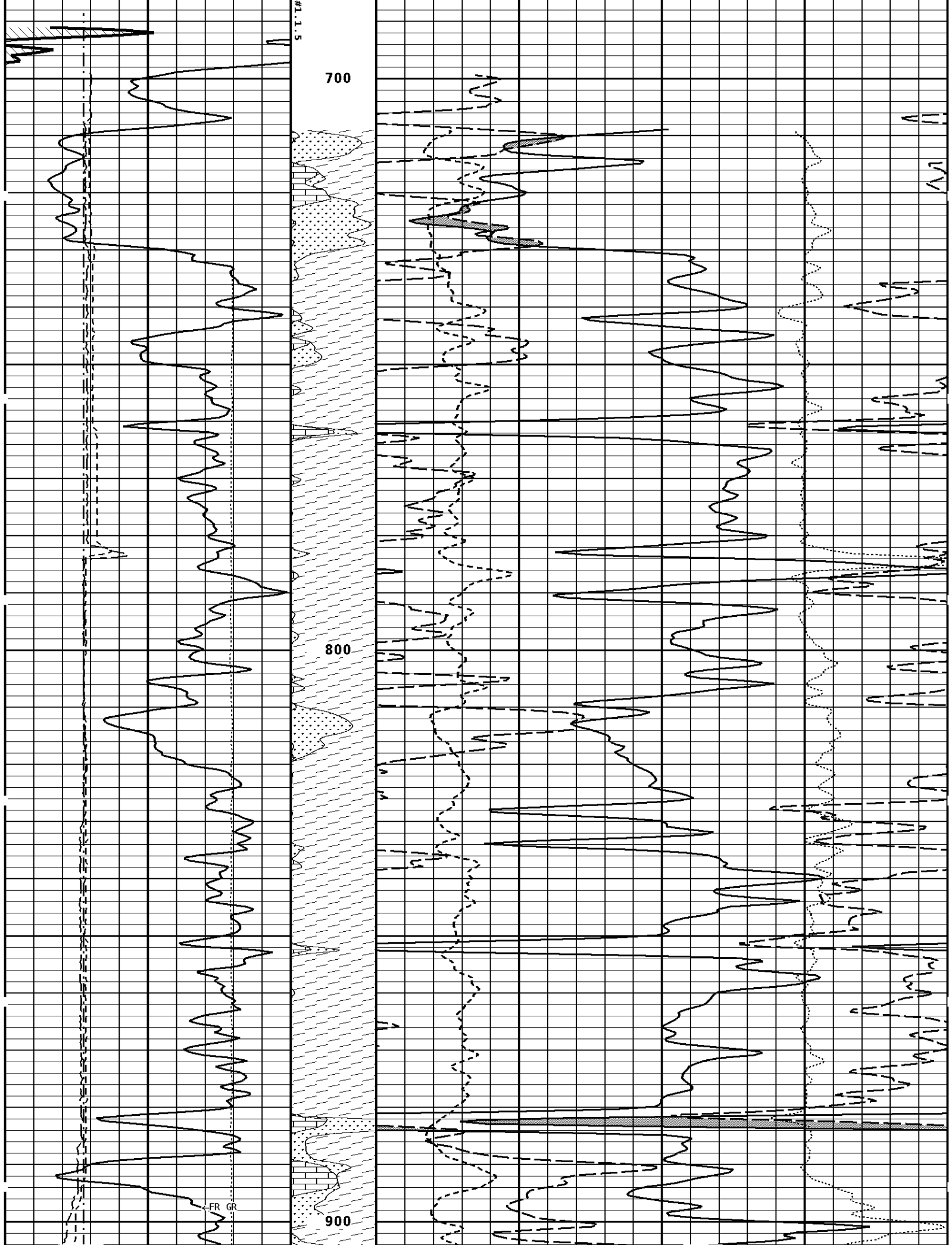
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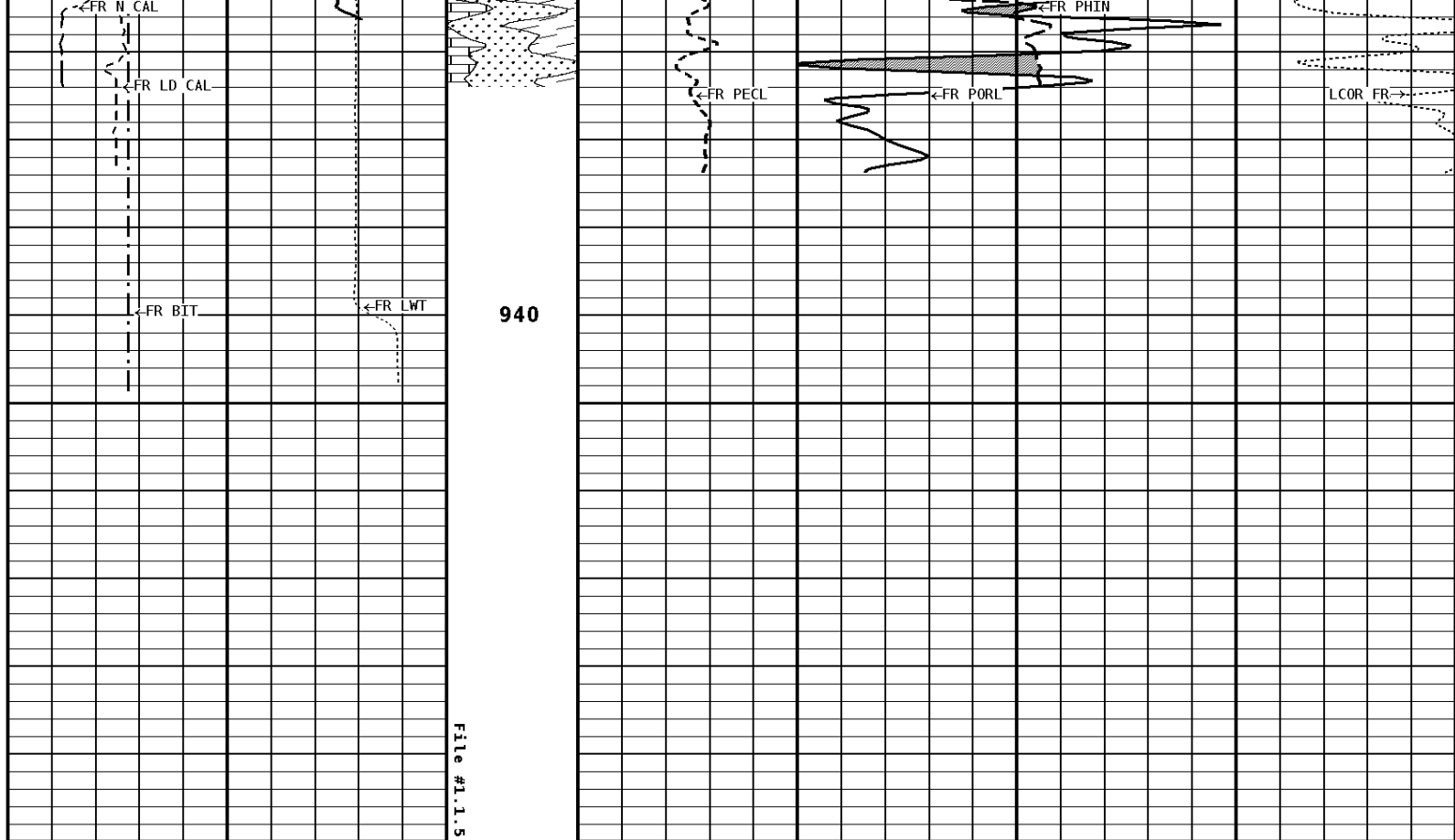
e #1.1.5

700

800

900





1:240 REPEAT SECTION

GAMMA RAY API UNITS 200 400 0 200	Volume Dolo/Shale 70 30 -10	DENSITY POROSITY PERCENT (2.71 g/cc) 30 -10 -50	
NEUTRON (Y) CALIPER INCHES (IN) 14 24 4 14	Volume Calcite 70 30 -10	NEUTRON POROSITY PERCENT (LIMESTONE MATRIX) 30 -10 -50	
DENSITY (X) CALIPER INCHES (IN) 14 24 4 14	Volume Quartz 0	PE CROSS-SECTION BARNS/ELECTRON 10	DENSITY CORRECTION G/CC -0.25 0.25
BIT SIZE INCHES (IN) 4 14			
TENSION LBS 10000 0			

*** Borehole Zone Factors ***

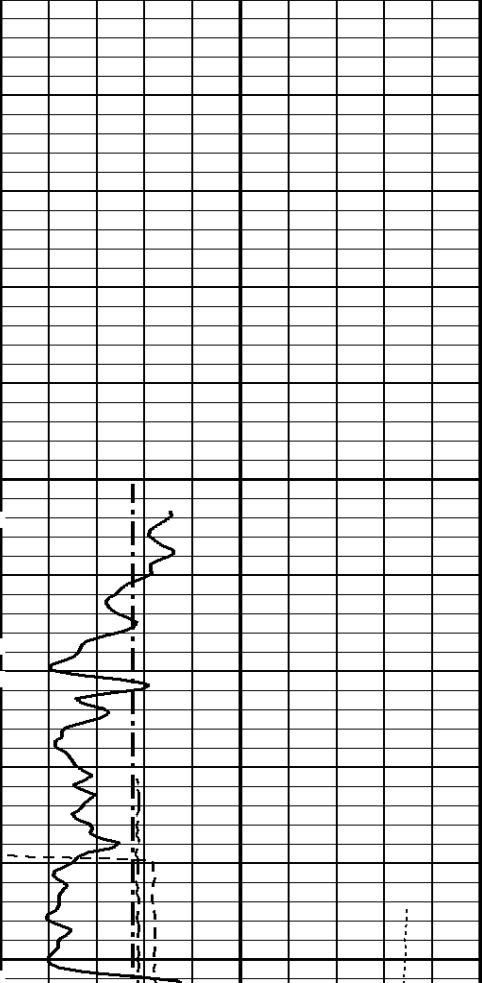
Zone 1 99999.0 to 0.0 Feet	
Matrix Density _____	2.71 g/cc
Fluid Density _____	1.00 g/cc
Formation Matrix _____	Limestone
Drill Bit Size _____	6.750 in
Casing Diameter _____	4.500 in

Well File: run_dic 10-22c-3 apr_30_stk Scale: 1:240
 Segment: V1.D1.S6 MAIN Acquired: 2012-04/30 12:27 3.2.0-10932
 Reference: 0 Processed: 2012-04/30 12:56 3.2.0-10932

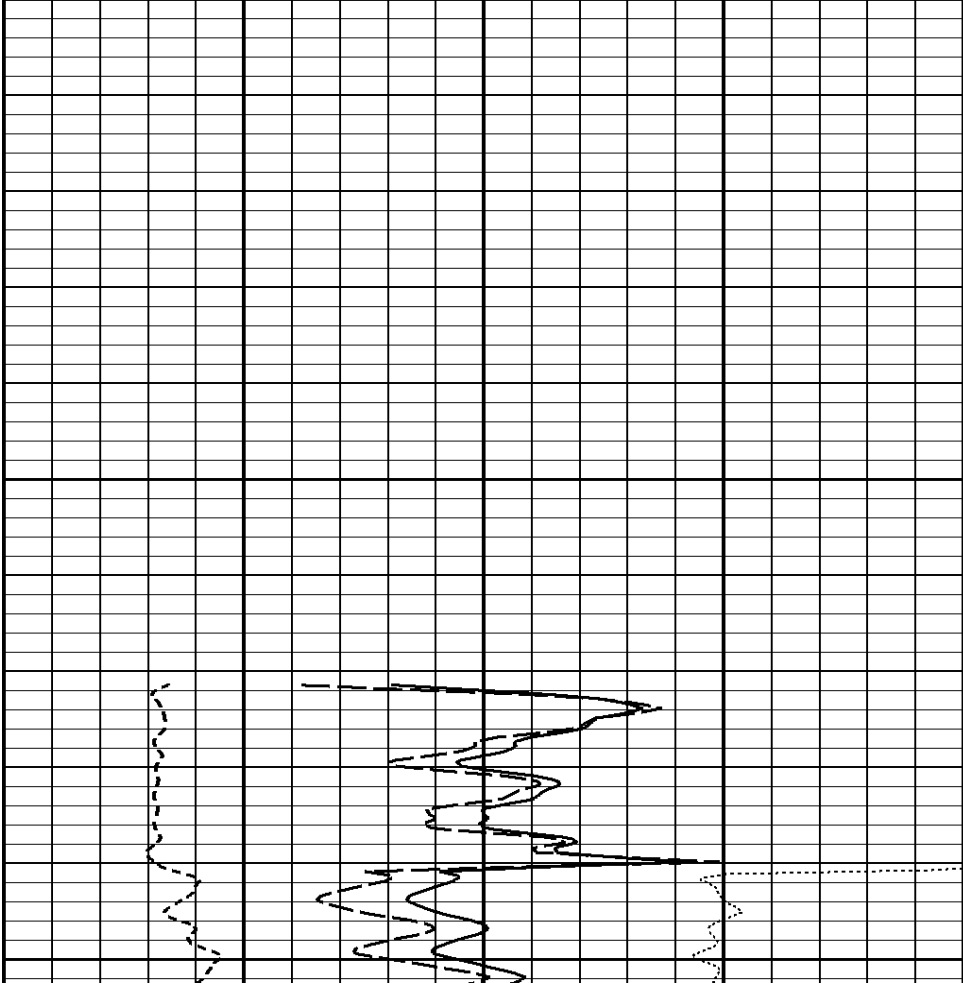
TENSION LBS	
10000	0
BIT SIZE INCHES (IN)	
4	14
DENSITY (X) CALIPER INCHES (IN)	
14	24
4	14
NEUTRON (Y) CALIPER INCHES (IN)	
14	24
4	14
GAMMA RAY API UNITS	
200	400
0	200

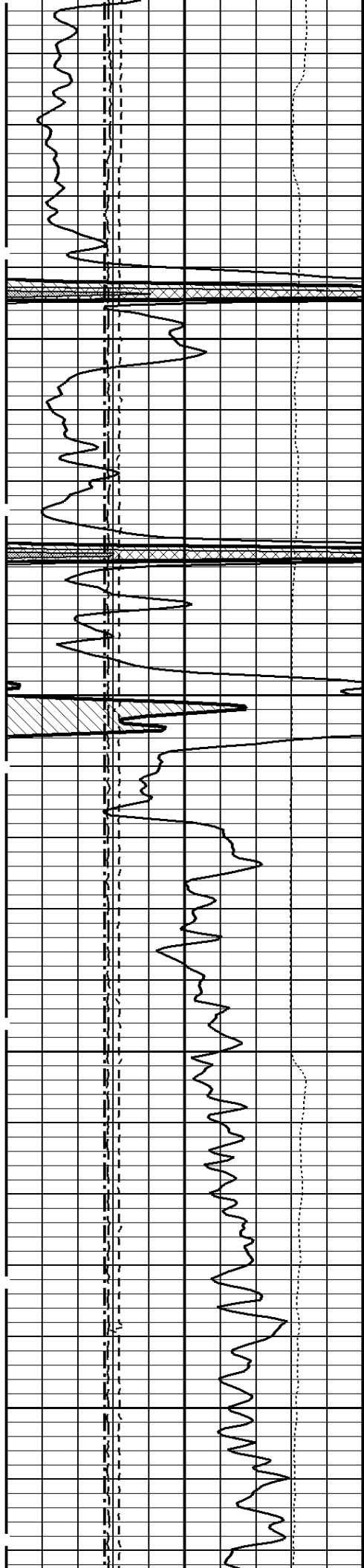
PE CROSS-SECTION BARN/ELECTRON	DENSITY CORRECTION G/CC
0	10
DENSITY POROSITY PERCENT (2.71 g/cc)	
70	30
30	-10
-10	-50
COMPENSATED BULK DENSITY G/CC	
3.0	4.0
2.0	3.0
1.0	2.0

**1:240 MAIN SECTION
BULK DENSITY**



000

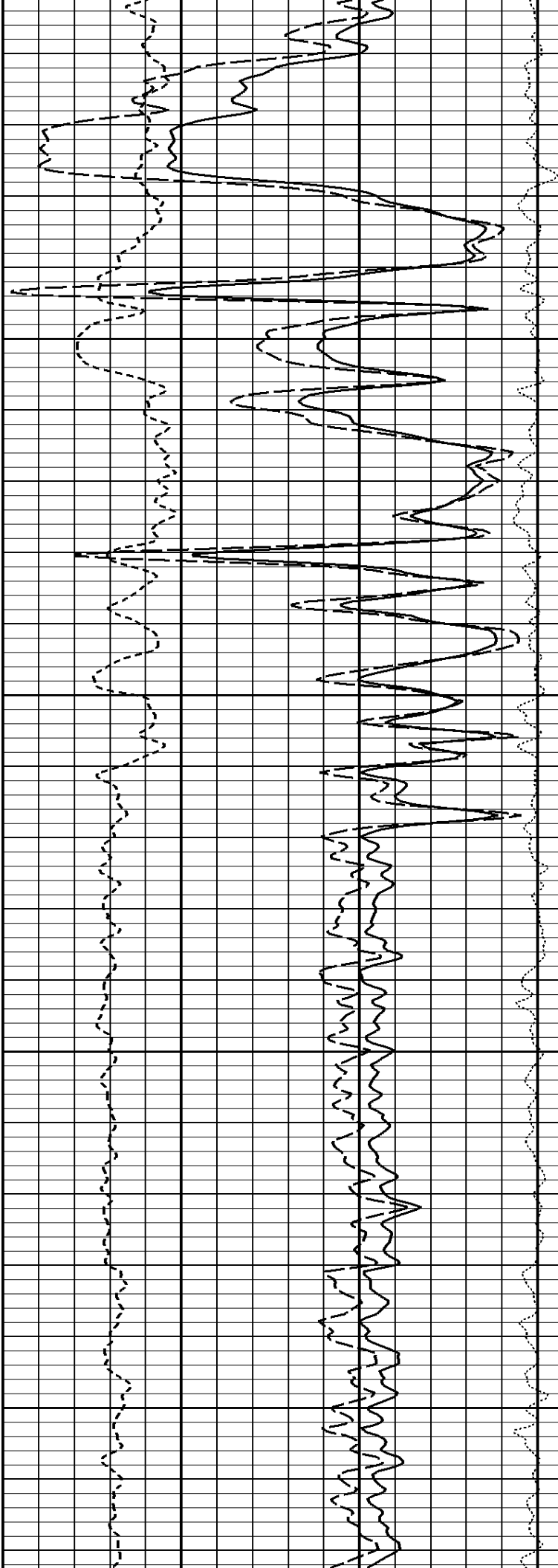




100

--200 Cu. Ft

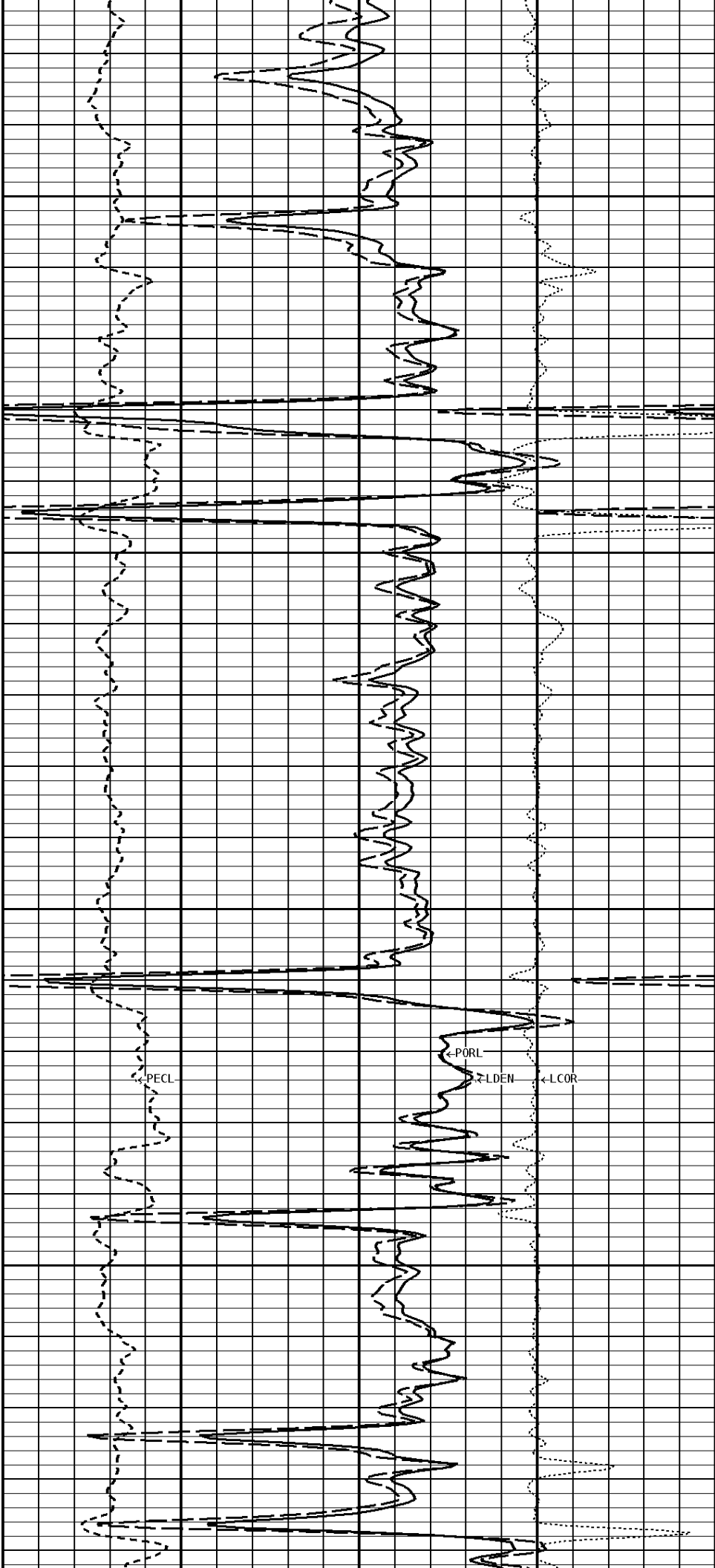
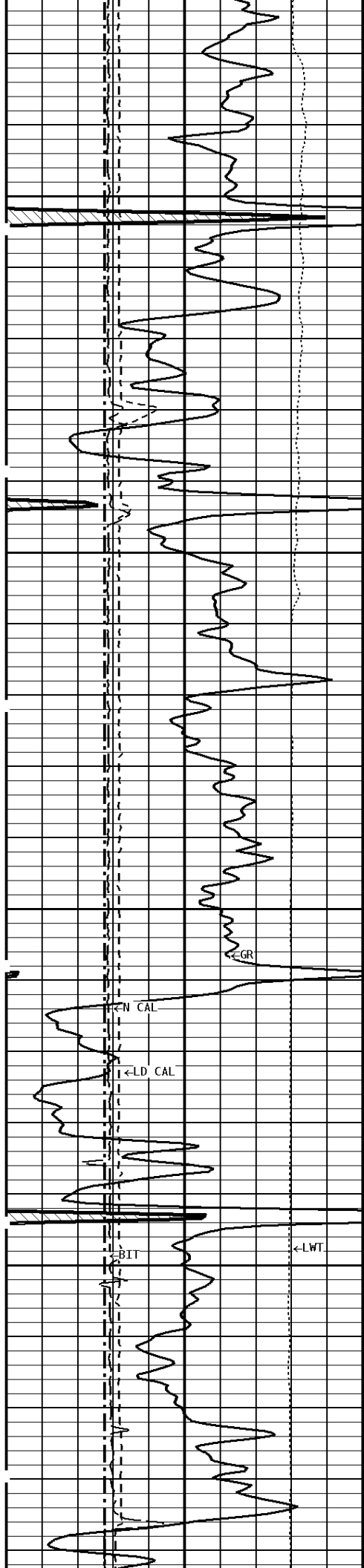
200



100Cu. Ft.

300

400



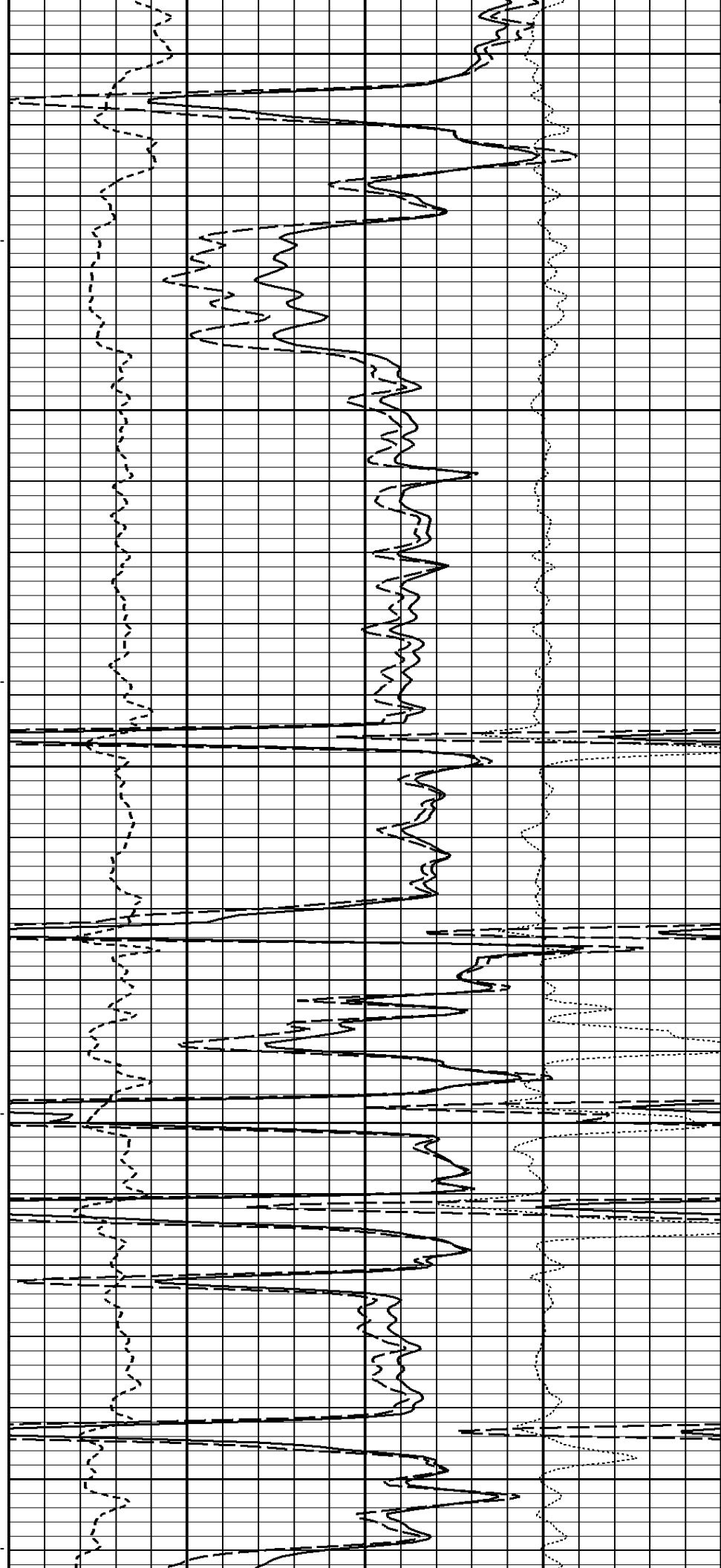


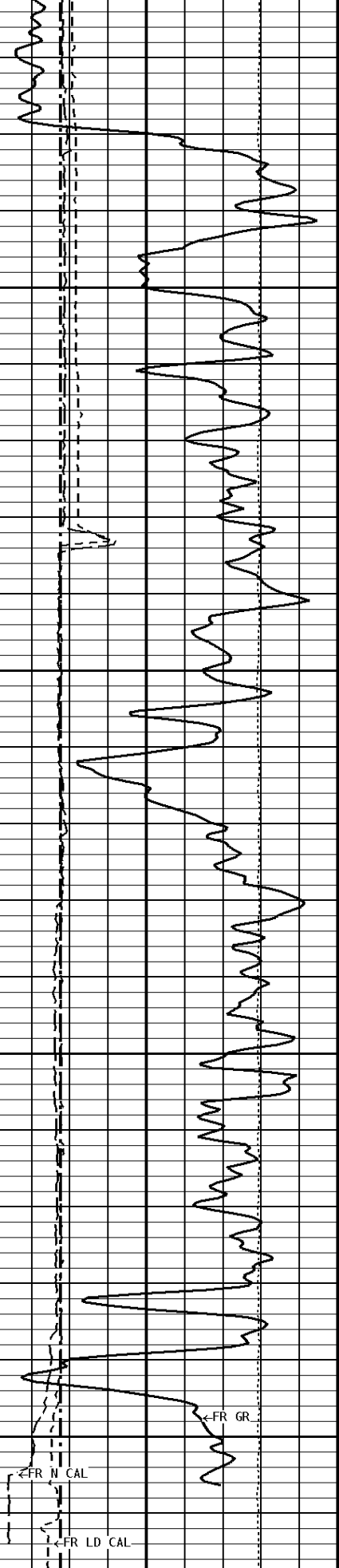
500

--100Cu. Ft

600

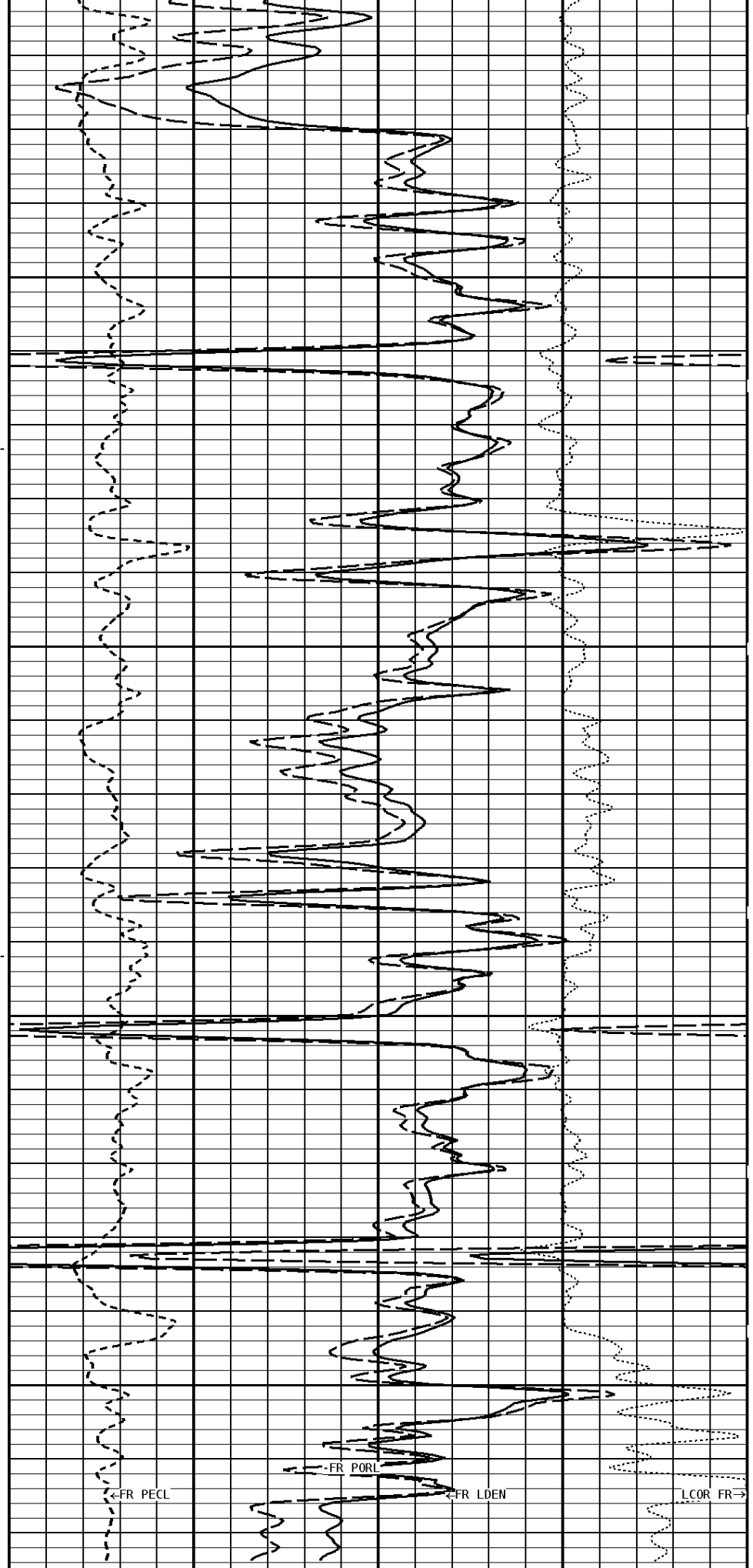
700

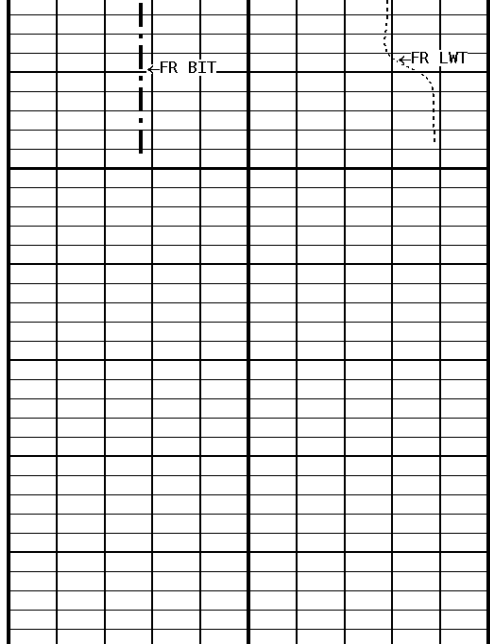




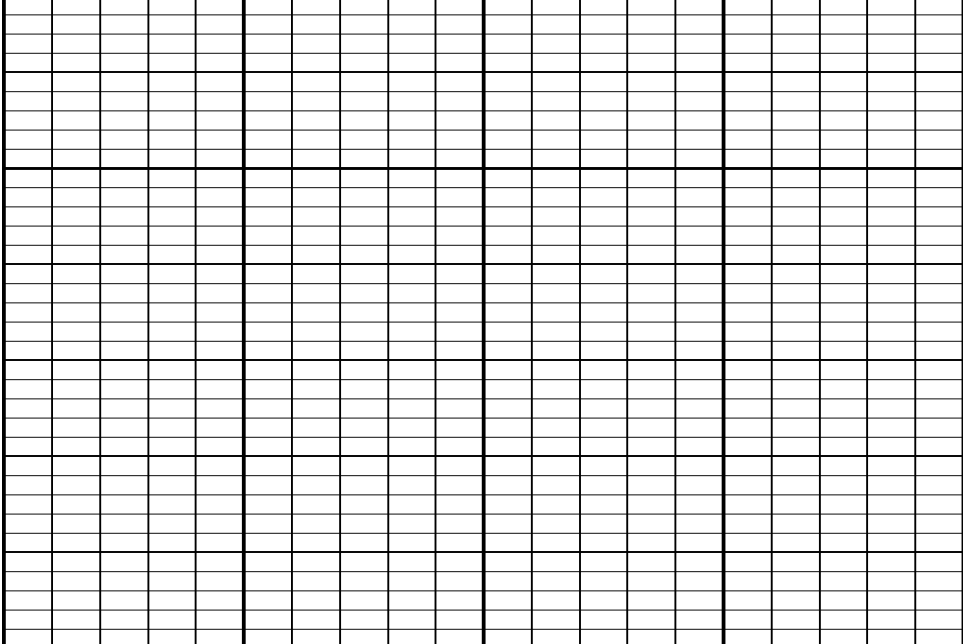
800

900





940



**1:240 MAIN SECTION
BULK DENSITY**

GAMMA RAY API UNITS 200 400 0 200	- BHV AHV - CU. FT	COMPENSATED BULK DENSITY G/CC 3.0 4.0 2.0 3.0 1.0 2.0	
NEUTRON (Y) CALIPER INCHES (IN) 14 24 4 14		DENSITY POROSITY PERCENT (2.71 g/cc) 70 30 30 -10 -10 -50	
DENSITY (X) CALIPER INCHES (IN) 14 24 4 14		PE CROSS-SECTION BARNS/ELECTRON 0 10	DENSITY CORRECTION G/CC -0.25 0.25
BIT SIZE INCHES (IN) 4 14			
TENSION LBS 10000 0			

*** 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	_____	6.750 in
Casing Diameter	_____	4.500 in
Casing Correction (PHI N)	_____	Disable

*** Calibration Summary ***

Shop Calibration GRT-B	
Performed : 25-Jan-2008	Time : 10:22
Sensor Suite : GR-GR5	ID : GRT-BB-109

	Background	Measured Jig	Units	Calibrated Jig	Units
GR	48	318	CPS	175	GRAPI

**Shop Calibration
CNT-AA**

Performed : 21-MAR-2011 Time : 11:09
 Sensor Suite : CALI-BCN ID : NDT-AB-400

CL # 1	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
	5.0	11.1	6.0	12.0	IN.

Performed : 24-OCT-2011 Time : 09:26
 Sensor Suite : BHC NEUT ID : CNT-AA-102
 Source ID : N-1045

	Measured	Tank Calibrated	Verification Jig	Units
N/F	3.8171	3.6893	3.6853	
Porosity	22.5	20.5	20.4	%

**Shop Calibration
LDT-DA**

Performed : 29-AUG-2011 Time : 17:21
 Sensor Suite : CALI-LTH ID : NDT-BB-109

CL # 1	Jig - Measured		Jig - Calibrated		Units
	Ring#1	Ring#2	Ring#1	Ring#2	
	7.3	13.3	6.0	12.0	IN.

Performed : 06-Dec-2011 Time : 17:58
 Sensor Suite : BHCPELNG ID : LDP-DA-36
 Source ID : CSV-B45

Short Space

	BKGD	Al	Mg	Al+Fe	Units
LSW1	75	842	1355	558	CPS
LSW2	78	1000	1578	733	CPS
LSW3	297	2347	3743	2036	CPS
LSW4	364	2069	2929	1858	CPS
LSW5	34	51	55	49	CPS
LSW6	94	99	97	98	CPS
LSW7	61	66	65	66	CPS
LSW8	2	4	5	4	CPS
QS	0.211	0.201	0.201	0.199	
PES			2.778	5.967	
SSDN		2.600	1.680		G/CC

Long Space

	BKGD	Al	Mg	Al+Fe	Units
LLW1	108	962	3877	599	CPS
LLW2	121	1716	6810	1253	CPS
LLW3	472	3268	12158	2846	CPS
LLW4	604	1656	4715	1527	CPS
LLW5	74	76	102	75	CPS
LLW6	198	186	172	189	CPS
LLW7	115	121	117	125	CPS
LLW8	4	7	14	6	CPS
QL	0.265	0.210	0.192	0.205	
PEL			2.697	5.458	
LSDN		2.600	1.680		G/CC